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TOXIC SUBSTANCE MEETING

March 3, 1977

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State Room
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Patrice Ann Houlf
Court Reporter

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16. ABSTRACT

The 11 individuals on the panel discussed the Toxic Substances Control Act, voicing their employer's concerns, interests, and wishes about this piece of legislation and its effects on them. In some cases they also voiced their private feelings and questions on the subject.

The inventory list was a running theme throughout all of the discussion. Panelists expressed their opinions about how the inventory should be handled, what it should include, and questions remaining to be resolved in putting the list together and its handling afterwards.

These individuals represented government, industry, and education.

A question-and-answer session followed the panel discussion.

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PRESENT:

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Washington, D. C.

Mr. Fred Krikau
Interlake Incorporated

Mr. Kenneth Brown
Sherwin Williams Company

Mr. Victor Denslow
Amoco Chemical Company

Mr. David Comey
Citizens for a Better Environment

Mr. Robert Duprey
Director of Air and Hazardous Materails
Div. Reg. 5, U. S. Environmental Protection Agency

Mr. Thomas Murphy
DePaul University

Mr. William Brungs
U. S. Environmental Protection Agency
Duluth, Minnesota

Mr. William Petrich

Mr. Jake Dumelle
Illinois Pollution Control Board

Mr. James McDonnell

MR. RITCH: Ladies and gentlemen, could we get the meeting started?

This afternoon we're going to have discussion on the inventory and pre-marketing. I will introduce myself, John Ritch, recently appointed Director of the Industry Assistance Office. As many of you may know Section 26D of the Law requires that the Agency set up an office to provide technical and non-financial assistance to manufacturers and processors relating to the policy of the Law and the means and methods of implementing same. That is the office that I am now heading although the office is right now me, but we are going to have a staff as we can get them aboard, and our purpose is -- primary purpose is to keep all manufacturers, processors, and other parties that are interested in the implementation of this Law informed on what the policy is, get their comments, and try to work them into the actions that we are taking such as regulations and also to help them in any-way we can to insure that they are properly implementing the requirements when they are firmed up.

As an initial effort we have been doing something that we currently call Operation Outreach which is partially in meetings like this in putting an announcement out on the desk of the establishment of my office plus some cards which I think most of you have picked up, which if you will send in, they are self-addressed so there is no problem to send them to me, to get you on the mailing list for anything we are coming out with.

Now Mr. Johnson mentioned in his talk this morning that yesterday Mr. Ouarles finds the regulations relative to -- I believe he mentions Sections 8A and B. For example as soon as that comes out in the Federal Register we will insure that copies are reproduced and disseminated to those people on the mailing list so if you don't get the Federal Register as such we will try to keep you informed anyway.

The main thing is in this very complex act that we are trying to implement, it is fundamentally important that as we proceed you know what is going on and give us your input. I want to stress that because quite a few people

come to these meetings and ask questions and expect us to give them the answers, and then if they don't like the answer, they gripe about it, and six months from now we'll get some gripes because we didn't pay any attention to it, but one of the things that is very important when these proposals come out that you if you have a feeling about them that you submit that in writing as requested, that the comments come in because they are considered and balanced between the various points that we have to consider, and sometimes they don't appear to be absorbed, but there is a good reason that they aren't, but already many, many points made by some of these groups like the committee of 19 that was mentioned this morning, their input has been very instrumental in modifying or revising some of the initial papers that are going out.

So I suggest if you want to keep abreast of all this that is going on, be sure to fill out one of those cards. I think there are still cards left out on the table, and mail them in and as we can handle it, we will get you on the mailing list and see that you are kept informed

of these various proposals and various information.

As Mr. Johnson said, that many of these things will require public hearings, and we will advise you when and where the hearings are. This is one of the -- I guess it's the fifth now of the regional meetings, and we will be having meetings in the other regions until the 23rd of this month in Denver, but obviously we will again begin another series perhaps in May to bring you up-to-date where we are in the Regulations that have been proposed, that Mr. Johnson listed this morning, and what some of the major issues have turned out to be, that is the main points of contention, and what might be done about them.

Well, enough of that. This afternoon we're going to have discussion we said of the inventory list and pre-marketing notification. We have a panel up here composed of a number of people who have different interests.

On my immeidate right is Mr. Fred Krikau of Interlake Incorporated. He is their Director of Environmental Control and also serves as an Assistant Chairman on the Illinois Industries

Task Force on Regulated Substances.

Next to Mr. Krikau is Mr. Ken Brown of the Sherwin Williams Company. He has had 35 years experience in technical and manufacturing management. He's currently Director of Civic Affairs of the company, also a member of the Illinois Manufacturers Association and served as Chairman of the Environmental Committee. On his right is Mr. Victor Denslow of the Amoco Chemical Corporation who is a Chemical Engineer. He is experienced in the technical marketing of plastics. He is presently Coordinator of Product Environmental Affairs for Amoco. He is also a member of the Manufacturing Chemist Association, the Illinois Chamber of Commerce, and the Society of the Plastic Industry, and the Society of Plastic Engineers.

On the far end of the table is Mr. David Comey, Executive Director of the Citizens for a Better Environment. He was previously Director of the Environmental Research for VPI which is the business and professional people for the public interest.

Mr. Comey taught at Cornell Univer-

sity. He's been active for the past ten years in citizen and environmental efforts.

I think to start the meeting, each of these gentlemen will have something to say about the section of the Law which we are discussing. So I will start off and ask Mr. Krikau if he would like to make his presentation.

MR. KRIKAU: With all the cables and things they have got, it's almost impossible to walk.

What I would like to do is talk a little bit about inventory, and I want to put it into the context of some of the work that was done by the Industrial Task Force on Regulated Substances and in the State of Illinois. So perhaps I should give you a little bit of a background of what this task force is, and what it has been doing.

About two years ago as a result of a series of severe incidences in which toxic or hazardous materials were suddenly released into the environment which resulted in people having to be removed from their homes, what have you, the Governor of the State requested the Illinois Environmental Protection Agency to adopt regula-

tions governing toxic substances in the State of Illinois. A piece of legislation was drafted very quickly and was put up for public hearings and immediately ran into all kinds of snags, those snags being lots of very, very critical questions which I am sure this piece of legislation on the Toxic Substance Act which we are here to learn about today is going to run into. It's going to be about the same thing.

The question we ran into when the regulation was first adopted is Number One, what the heck compounds are toxic and in what quantities and what percent mixtures since we were dealing with or a regulation that was designed to protect the public health in case of an accidental spill of a toxic material into the environment.

The question became what kind of disaster control plans should be developed for the industrial community within the state, whether these compounds should be registered, whether the disaster control plan should be approved, all kinds of nagging questions which I'm sure as you go along you are going to run into with yours.

Since these questions were not being answered very quickly through the public hearing process, through the Illinois Institute of Environmental Quality, the Industry Task Force on Regulated Substances was formed. Its purpose was to utilize to its ability the trade associations existing within the state in order to get the answers to these questions directly from the industrial community.

The reports of this task force has not yet been formally released. I would like to give you some astonishing results of what we have found out. We ran a survey through the trade association namely the Illinois Manufacturers Association and the Chicago Association of Commerce and Industry, and the Illinois State Chamber of Commerce. We were able to contact over seventy percent of all stationary sources within the State of Illinois and got responses from them as to what chemicals they had stored, in what quantities, and what form, how they inventoried it, how they maintained inventory control, what would they do if they accidentally spilled it into the environment, how would they monitor it,

and whether or not they had established plans for coping with an accidental spill to the environment. I would like to read you some of the results of this survey.

We found out that sixty-two percent of the stationary sources in Illinois had compounds that were considered toxic in quantities that were also considered to be dangerous if released into the environment. Interestingly enough eighty-three point three percent of the Illinois industries had no established program or plan to cope with a disastrous spill to the environment. Fifty-one percent, a little over fifty-one percent, didn't even know what they had. They had no inventory control. They didn't know in what quantities. They knew they had the chemicals in their plant somewhere, but they didn't know how much or even where it was located. Some of this may not be of interest, the regulation in question, but we asked questions of how they would monitor, by what means would they monitor a spill. Seventy-eight percent said they didn't know. If it happened, it happened. We asked who they would contact if they had a spill, and the

answers to those questions were wide.

However, only eleven percent said they would ever contact a government agency. Just for interest's sake I'll read off another statistic of the compounds that are stored in the state. Thirty-two percent of them were stored in tanks, forty-seven percent in drums, one percent in vats, about three percent in cartons, about four percent in cylinders, four percent in cans, four percent in carboys, four percent in glass bottles, and about one percent in bags.

When we look at the results of the inventory in terms of geographic location throughout the state, potential for a disastrous spill to the environment broke down as follows: About fifty-seven percent was in Cook County, six point one percent in DuPage, four percent in Kane, six percent in Winnebago, three percent in Will, two percent in Lake, and it goes all the way down becoming far less. The survey revealed very quickly that the biggest problem within the state exists within Cook County. Of course Cook County has the highest population density within the State of Illinois also.

I think the results of the survey that we ran indicated that it would be most important in terms of the inventory section that is within the present toxic substance that that inventory procedure be enforced to make sure that everybody that is handling these chemicals really know what they have got, and what quantities, and where it is at, and with that I will stop.

MR. RITCH: Thank you, Mr. Krikau. I think that may not be directly pertinent to the afternoon discussion, but it does certainly emphasize the reason we have legislation raised now to try to correct some of this.

Mr. Brown?

MR. BROWN: My remarks are going to be somewhat more philosophical and more general and not so technical because I have three experts up here as far as technicalities are concerned.

As I have gone through life I have become more of a generalist, I guess, and now I am in the civic affairs which is even more than general. It's amorphous. So I am as I say, I'm consequently becoming a little more philosophical, and I would like to touch on some points relative

to the Toxic Substance Control Act.

In that light, in the first place, I would like to say that I certainly sympathize with those of you that have been appointed to administer this Act. It's very complex. It's very huge. As you have heard this morning that it's a one hundred billion dollar industry, and there are some thirty thousand chemicals in the market today, but I presume sympathy isn't enough. I guess we have to have some emphathy which means we have to understand each other and work together.

Based on Mr. Krikau's statistics it certainly shows that there is a need for such regulation if we need any further proof than the experiences we have had with PCB's, asbestos, and mercury. A great deal of education is going to be required, a great deal of communication. There are a great many sources of information that are now available, and there is also a great void of information particularly in the field of toxicology, but I would certainly hope that we will proceed with mutual confidence and cooperation in avoiding the adversary until absolutely necessary since there is a great deal of scientific information

that needs to be evaluated and interpreted first. I would like to avoid that situation.

I know that Lord Chesterfield once said that the world is divided into two classes of people, the right and the wrong, and the right would decide which is which. Well, obviously that creates a great deal of confusion and a great deal of insight which I don't think we can afford on a subject as important as this.

I think we need to enlist and much of this has already been done. Enlist all trade associations that can provide information. The Agency has done that. Industry should make more use of trade associations and in helping all they can in developing the inventory list and as priorities are established and as new products are brought forth, but also I recommend in this instance that this has also been done as you have seen this morning use of task forces covering a wide range of talents and information.

Here again I want to revert back to Mr. Krikau's experience, and I was fortunate enough to work with him on the Illinois Regulated Substances Task Force. I think we got a lot of information

fairly quickly by using that method.

There are some major points that I would like to talk about that I think we ought to keep in mind in this point of durability. Duplicity, and I guess duplicity is not too bad if rules supplement each other, but I guess the kind of duplicity we are talking about is where more than one agency has authority in certain areas, and they come out with conflicting rules and regulations. I am waiting for the day where some state highway when the Transportation Department for instance might say that the maximum speed limit for safety reasons is thirty-five miles per hour, and the Police Department saying we must keep traffic moving, might set the minimal fifty-five miles per hour, and these signs would be posted alternately down the route, and you'd have to make a pretty tough decision. I guess the decision would be to stay home, but this point is brought out in the Act, and I think that is encouraging. It's brought out in Section 9 of the subject in relation to other federal laws. So the intent of the Act as it was written was to avoid that sort of thing. The consideration of the economic

part of the picture is another major point that we ought to talk about and particularly its effect on small business, and this has also been covered in the Act in Section 6.

You had dissertation this morning that the Agency is particularly concerned about small business. The confidentiality is a subject that is not particularly covered in the Act, but there was a great deal of discussion on it this morning and several questions relative to it.

So I am encouraged that the Agency has started out with the spirit of cooperation with the spirit of offering help, recognizing that they need help, and that is a cooperative effort. I am also encouraged that these particular points that might bother -- might prevent obtaining the objective have been covered in the Act. Of course our hope is that we can all maintain that attitude throughout the limitation of the Act.

On the other hand there are four pitfalls which I can see that might arise that would lead to the loss of durability and hence of the whole program and hence lose sight of the objective. What is in developing the list and

accepting tests and evaluating tests that a compound or a chemical would get into what we call vacillating status. This would drive financial people up the wall.

These thing I'm going to cover are the things I think that bother business people in the area of making it difficult to make decisions. Now you have heard a lot of criticism from the business and industrial sector about paperwork. This obviously is a very costly thing and a very troublesome thing.

No new Act like this -- I don't think anyone that I have heard from this morning ever said that this is going to reduce paperwork. It is going to require a lot of paperwork, but I think one of the arguments that has not come through from business executives regarding regulations is those rules and regulations that make it difficult to make business decisions, and if you had a major product that one day would be all right and as more information developed and then it would not be all right, this would be very difficult for management to deal with.

Another thing that I'm rather

concerned about is the -- and this gets into legal, and I don't want to pursue it too far, but it's just a red flag that keeps popping up in my mind is the matter of what I called retroactive guilt. Now records are to be kept relative to the effect on people and particularly employees for thirty years, and some of these records have already been started under OSHA and under NIOSH, and as new and obviously we're going to continue adding information and suddenly something is now becoming toxic, the employer is liable to say fifteen years down the road in this thirty-year-record. Then they're going to be retroactively guilty, and I hope there is some legal consideration that will be given in the implementation of this Act, that the liabilities on such things could be very economically costly, and in some cases put small businesses -- just wipe them out.

This morning I gathered from Mr. Johnson's presentation that there was some difficulty whether to call it a pre-production notification or pre-marketing, and I think there ought to be some thought given to this because I can't conceive of any company spending a lot of money on

research and development of a product, build a plant to make it, and then notify the Agency that they're going into production. No, I don't believe anyone is going to build multi-million dollar plants without knowing first if they could market it and without knowing secondly that the Agency says that it is all right to market. So I really think that ought to be -- I think pre-marketing notification is the correct terminology, and the last thing that could lead to the lack of credibility in the breakdown of the chasing of this very complex problem and one of the most disturbing things I heard this morning was that it may take thousands of people in this Agency to implement the Act.

I would think perhaps if I was going before the Appropriation Committee in Congress I would make the same kind of statement as a matter of negotiations, but I think that it is something we all ought to keep in mind because the way this Agency has started I think we're very pleased with it, and it will remain in our mind as an Agency as long as it keeps the same attitude, but if we get into the position of over protecting people to the point where they have thousands of employees

to control thousands of chemicals then it looks like they have lost sight of the goal, and they're not protecting the people from toxic substances, but might get in that position where they are protecting the Agency in which case in my definition it then becomes a bureaucracy.

MR. RITCH: Thank you, Mr. Brown.

You have given us a lot of things to think about. I guess it takes a little while to discuss it. So we let Mr. Victor Denslow give his presentation please.

MR. DENSLOW: You feel like you need Olympic training to get around here.

Just for the record here I am today submitting statements on behalf of the Manufacturing Chemist Association, the Illinois State Chamber of Commerce, Environmental Committee, and Amoco Chemicals. This session is stated to be addressed to pre-marketing notification and inventory. In discussing this I understood that we were not to go into other issues so I have addressed a few issues addressed a little beyond the stated subject, but if this is out of order I guess we can edit this out of the tapes.

We do appreciate this opportunity to provide suggestions to the EPA which we hope will be helpful in arriving at an effective and practical implementation of the Toxic Substances Control Act. As those of us who have been working with this Act for any length of time are well aware the Act and the subsequent rules and regulations are and will be very highly complex and will reach into virtually all areas of our society.

Everything is a chemical or a combination of chemicals. It thus becomes a very demanding age of difficult responsibility to attempt to insure implementation of the Act as due consideration to the potentially widespread effects. Much work by all parties involved remains to be done and meetings and discussions such as this are necessary for proper development of workable regulations.

My comments today will be limited to selected issues consistent with the time available. In regard to the Section 8B inventory list of existing substances we believe it is highly important that confidential information particularly regarding chemical structures be respected as called

for in the Act. It would seem appropriate to have a published public list and also a confidential list containing structures and/or other necessary indentification of substances maintained within the EPA. If someone does not find their proposed substance on the published initial list then they could contact the EPA to enquire whether or not the substances are on the confidential list.

Also regarding the Section 8B inventory list we would concur with what we understand is EPA's position that intermediates and by-products be included only if they are recycled or reused in the same or in different processes. This would eliminate the listing of waste streams destined for some form of disposal. However, it should be understood and specific regulatory language to be developed that such unlisted waste substances for existing processes will not be later somehow interpreted to be new chemical substances possibly leading to pre-market notification and the result of plant shutdowns for a ninety-day-period. If such waste should later find a commercial use they would of course be controlled under the significant new use regulations.

Also to be consistent such waste streams should require nothing more than a description per Section 5B in connection with pre-market notices for new chemical substances and likewise should be specifically exempted from later being construed as new chemical substances.

Specific language on these points is believed necessary since the wording of the Act easily includes waste stream as a chemical substance under the definition in Section 32A thereby bringing them under various provisions of the Act and also this language since a new substance is defined as anything not on the initial 8B inventory list.

In regard to the Technical Assistance Office, EPA would believe should resolve the extent to which a person who obtains advice from the office can rely on that advice for positive legal compliance with the Act and its regulations and as a legal defense in case of later controversy. This situation has plagued the Internal Revenue Service for years, and we hope to avoid this problem. Since it is to be expected that advice from the office is from centralized experts rather than from a large and dispersed group of advisors and that the requests

will directly or indirectly relate to specific compliance, the advice should be legally sound and usable with confidence by the enquirer. At least any information given out in writing should be a legal defense by the enquirer. Otherwise the value of the office would likely be minimal for anything other than clerical-type activities.

In Section 5H3 regarding the exemption from pre-market notification for substances during research and development, the EPA needs some definition to respond to the quantity limit section of the Act. We believe it is impractical to use specific generalized quantity limits because of the widely varying nature of testing needed to establish the worthiness of new products in various applications. We support the proposed EPA definition that "Small quantities should include such amounts of the chemical substance manufactured or processed or proposed to be manufactured or process no greater than reasonably necessary for scientific experimentation, testing, research, or analysis including such research or analysis for development of a product."

I would however propose that the following be added: Such research and product development must be under the supervision of technically qualified individuals and can include no activities known by the manufacturer or processor to present significant hazards in the human and environmental exposures involved.

In numerous parts of the Act judgments and rule making regarding unreasonable risk and various health and environmental factors will require information and total U. S. sales volumes, sales volumes to specific uses, numbers of people exposed, degrees of exposure, the treating of health and environmental data, et cetera.

Such information could be needed for example in establishing the risk list and deciding the need for testing for Section 8A reporting and many decisions under Section 5 and 6. Not only would it be duplicative for a number of companies manufacturing the same product to separately attempt to develop and submit complete data on the same substance, but in mere summation from such separate test data submitted might not be representative of the true national picture.

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It seems likely in many of these projects joint industry efforts in collecting such information where applicable would be much more efficient, accurate, and with a considerable savings in costs.

However, since such procedure may involve sharing of information related to marketing, it would appear desirable if not necessary to have Anti-trust protection. It is supposed that the EPA give consideration to accepting such during activities and planning and appropriate legal requirement for implementation. We will be giving further attention to details and practical procedures in this area. We would also like to emphasize that test data on health and environmental effects is only data and is not in itself a complete measure of hazards to the health or to the environment.

An assessment of a harzard, subsequent judgments on the actual degree of risk to health or the environment and regulative decisions involved additional factors such as the quantity entering the environment, degree of exposure, number of people elected to be affected, the type of effects, et cetera, as spelled out in various

sections of the Act.

We hope that everyone involved will understand these differences and not make preemptory judgments on test data alone. We believe there will be considerable difficulty in implementing the Act without some form of definition for unreasonable risk and substantial risks.

Admittedly this is difficult especially in view of public and social pressures. It must be emphasized however, there is no such thing as zero risk. Misuse of almost any substance can impair health or cause death in spite of our best preventative measures including regulatory controls.

The development of a framework for decision making seems very important, and undoubtedly this will necessarily include comparisons of the number of people likely to be affected. We would propose substantial attention to this problem.

Finally, since our country has adopted a national policy of metrication, and metrication is being gradually implemented in many areas, it is suggested that all regulations

developed by the EPA under this Act include metric values for any quantities involving units of measure.

A case by case decision could be made as to any given number requiring examination as to the metric equivalent of the conversion or whether the numbers rounded off to the metric equivalent would be a hard conversion, would be satisfactory. This would avoid the necessity of having to revise the regulations at some future date solely for metrication reasons.

Thank you.

MR. RITCH: I think you can see from Mr. Denslow's presentation that he has highlighted a number of issues that aren't settled, and yet he is to be commended with the cohorts that prepared the paper for recommending some constructive suggestions for how we should handle it. Now that doesn't mean necessarily it is going to be adopted in total, but at least it is the type of information and type of proposal we would like to have come in.

Last but by no means least, Mr. David Comey from the Citizens for a Better Environ-

ment.

MR. COMEY: As you are probably aware of by now the inventory list plays an extremely important role. The substances on that list will not have to go through the pre-marketing notification and testing that is required under other sections of the Act. Obviously there is a strong motivation on the part of industry if they wish to litter up that list with everything in the kitchen sink because that way chemicals that may come on the market later would already be on the list and wouldn't have to go through those procedures.

The Federal EPA has prepared a notice which is going to the Federal Register and will be published later this month. Basically what they propose to do falls short of what we environmentalists feel would be an appropriate inventory list.

What they're basically going to ask the manufacturers to do is identify all chemicals they produced since January 1st, 1977 and allow the manufacturers the option of also identifying chemicals produced during the last three years.

This would give them data base and would be useful in terms of identifying manufacturer's subject in future EPA Notices.

Some of us have a different view. We think the word inventory means an inventory not just a list of chemicals that have been produced since January 1st, 1977. We mean a real inventory, the sort of inventory that Mr. Krikau discussed, not only who manufactures the stuff, but in what quantities. We also think that the uses are an extremely important component in determining whether or not a health and safety question exists. We would also like to know what facilities the stuff is being produced at or processed at or stored at.

For one thing that information would be extremely helpful in the regional offices of the EPA. It would give them first handle on what substances they ought to be looking for in discharge permits that are going to have to be written over the next three or four years.

It will also give an early warning on what might be in some of those waste streams, but right now nobody knows what is in there. So

nobody knows how to go about laundering them, testing them.

One other reason EPA has chosen not to go with a more extensive inventory is that they don't think they will be able to handle the data. They also add that it may be in the next year before they have assistance for handling that sort of data. If they got very detailed reporting they say they wouldn't be able to meet the November deadline. I don't understand the logic. Data coming in on a form you could pick off whatever data is necessary for meeting the November deadline. Simply store the rest of the data until you get your data previously in operation. The question really becomes how are you going to be able to determine what the significant new use is if you don't know what the present uses are right now. If you don't ask for the present use, you ain't going to find out.

Obviously something that everybody is extremely concerned about at least if he's in the chemical industry is the question of confidentiality. EPA seems to be coming up with a product. It frankly is another fish in itself.

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They're proposing perhaps manufacturers would provide detailed support of his claim of confidentiality and prepared health and safety information concerning the chemical substance because of course that is not exempted from the Act that must be disclosed, but the manufacturer would instead of giving us the specific name of the chemical that he has, he would make up one as a matter of fact, and this would be -- the inventory would list this name, and it would indicate the chemical element that is present in it, and that would be all.

We would also be if the health and safety information were excellent a bibliography with what the relative information would be and supposedly that would be sufficient to comply with the Act. It seems like a silly way to proceed.

First of all in a general bibliography anybody can back calculate bibliographic items to find out what the real substance is rather than the generic name assigned to it by the manufacturer. So it doesn't seem to be -- particularly get you anywhere.

Furthermore, it is very important to

know what the actual substance is because those of us who are concerned about the health and safety aspects of it aren't going to be able to tell from any name that is given. So consequently it seems to me what they're proposing is A; it isn't going to fly, particularly in the courts, and it also does not seem to really purport with what is needed.

It seems to me if you are all that worried about confidentiality, maybe what you ought to consider is the right system. Don't use generic names. Actually list the chemicals. Discuss what uses you put them. This would be submitted to the EPA with the name of the manufacturer, but when EPA published this data the name of the manufacturer would be eliminated. In other words, one of these situations where you have a little bit of information here and there, and that is what is really useful to the competitor when he can put it altogether. If the name of the manufacturers are not there at least the public -- people who are concerned about the health facts can assess what the uses are and whether or not it is likely to lead to health problems, but is not going

to be that useful to the competitors.

Some of the other things that are proposed in the regulations seem rather strange. They seem to have a tendancy to have a list in Arabic rather than English. Mainly it looks as if they are going to use CAS numbers exclusively, and there is not going to be that much information in terms of what the chemicals are. I don't know how the public is supposed to respond to a list of numbers. It seems to me the list ought to be extremely specific. It ought to have specific categories and ought to spell out the names of the non-substances in each category.

In addition, we don't feel that small businesses should be exempted from contributing work towards this inventory. There are several reasons for that. Not the least of which is some of you may remember there was a small gasoline station, and suddenly it became life sciences. It's a small business. It did a lot of damage.

We were worried that there may because the Act became submitted a host of new businesses. As a matter of fact some companies like Amoco have

a lot of gas stations they could probably put to use. It seems that the way of proceeding is to have small businesses follow the same information as the large people do. Then have EPA make the determination how significant this contribution is and to what extent they should be exempted from further regulations under the Act.

There are a lot of other questions that really come up in this set of regulations that I will just briefly touch upon.

The regulations do not intend to cover mixtures. They do not intend to cover impurities. They also have a very minimal approach on what to do about polymers. They are considered polymers to the identification based on the polymers present in greater than two percent.

Well, we don't think that is an appropriate way of proceeding. Basically what it boils down to is that if the industry really wants to work together with EPA to solve this problem holding back information on the inventory list is not a very smart way of proceeding. I don't know how to solve all the questions of confidentiality. Frankly, I am not that concerned about it because

from the direction that I come into the whole toxic substance area I'm more interested in environmental health than I am in protecting the competitive nitch in the chemical active system.

If you want to protect yourselves in terms of the confidentiality of the uses to which you put chemicals, then it seems to me you had better spend some time now designing a system which will meet with all the intents of Congress in passing this Act, but will protect what you consider to be absolutely the sort of stuff you don't want your competitor to find out about. I think that can probably be worked out, but it doesn't seem to me that the regulation that EPA has put out be the way to go about it.

I would hope when you file comments on these proposed regulations after they appear in the Federal Register Notice you will make a genuine effort to try and win your way between the giving out of too much information that is useful to your competitors and not giving enough information that those of us who are concerned about the health effects will be totally unable to judge whether or not this substance ought to

be very tightly controlled or eliminated or allowed to be in commercial production.

I have used up my ten minutes.

MR. RITCH: Thank you, Mr. Comey.

Obviously you can see we have another viewpoint, and he has also made some constructive suggestions from his viewpoint on how certain portions of our regulations might be revised or ammended. I might point out at this point that there are certain things that are in the Law that are defined by the legislators who pass the Law, and the time frames in there are one of them. So in consideration of what you do sometimes from four and a half years of experience under the FIFRA I recognize that what you do and what you would like to do as to what the Law says and what the hell it tells you to do are two different things. So that has to be kept in mind too that some of these mandates for instance the inventory list and three hundred and fifteen days after the effective date and sixty-two days of that or approximately twenty percent of the time is already gone. This is mandating a little bit of how some of these things are handled and may not be right, but it means that

sometimes it may be a punch at Congress instead of EPA. It might be better placed.

Well, I think it's time to open up the floor to the panel, and if any of their comments have stimulated you to a question, we would be glad to hear from them now. I think the mike is in the center of the room, and hopefully the mikes on the table are working.

Does anybody have anything they would like to comment on on any of these suggestions made by any of our panel or if they want to just bring up questions about the Act.

Yes, sir?

MR. McDONALD: My name is Ira McDonald, Ashley Chemical Company.

My question, sir, is in regards to the draft of the regulations. I believe Mr. Johnson indicated that regulations pertaining to the inventory list would be published in late March, that the proposed regulations --

MR. RITCH: He reported that the inventory would be. The regulations, I think, or the proposals relative to this I think are the ones that Mr. Comey has been talking from and were assigned yester-

day by Mr. Quarles, and this generally means that four or five working days after that happens that they will be in the Federal Register. So that means probably about Tuesday or Wednesday of next week these will be in the Federal Register.

MR. McDONALD: That was my question, just when they will be available.

MR. RITCH: Right.

MR. McDONALD: Or are there drafts of that?

MR. RITCH: Well, the inventory control list.

MR. McDONALD: Not inventory list, the regulations pertaining to that.

MR. RITCH: I'm trying to answer.

The inventory list is obviously something separate from what should -- what the regulations are as to what should appear on the regulations.

Now as has been pointed out many times the inventory list that is coming out right now is a candidate list and perhaps if there are particularly strong attitudes about certain parts of the regulations then it may be that we may have to put out some ammendatory information that say when you handle a list do certain other things

that don't appear in these proposed regulations and we're trying to get on with what is going to be the final list, and here is the starting point.

Now it has been brought out there are some areas of issue as to whether the list ought to be longer, bigger, or detailed, and so on, but right now these are the proposed regulations which we hope you will comment on.

Now many of you don't get the Federal Register, but we're going to try to when this is published -- we will try to expand it to those people who are on the mailing list so they will at least see the regulations. I don't propose to get the fifteen hundred pages of the inventory into everybody's hands because I don't think I can, but we will try on the regulations which will probably be two or three pages in the Federal Register to duplicate that and see that everybody gets that.

Other questions, please?

MR. POIYES: My name is Roy Poiyes, and my question is addressed to Mr. Krikau to the extremely interesting set of findings you presented.

Could you tell us what the status

is now in the State of Illinois for the control of those?

MR. KRIKAU: At the present time the statistics I gave you are being prepared into a final report which will be presented to the Hearing Officer who is holding the hearing on the proposed regulations as it now stands. When that is done, and they have evaluated also the economic impact statement that has been submitted to the Hearing Officer, there will be again I understand a period of public comment after which time I believe the Pollution Control Board will act to adopt the regulation, but I would have to yield that question to Mr. Dumelle.

I saw him come in before, but that is basically where it is at now.

MR. RITCH: Any other questions?

I have a question here from the floor that was written up here from Mr. Howard Post of International Minerals and Chemicals.

If a company is claiming to manufacture a new chemical on one January 1978, what test should it now be conducting to submit with its pre-market notification application so as to

be sure it will not be submitting to the EPA insufficient data, and thereby not be proved?

I think it was brought up this morning that the actual information to be requested has not been determined. We're hopeful that here in the regulations on the pre-market notice application -- it should be out I think Mr. Johnson said about the first of April, will carry some indication of what tests would be required.

Obviously this is another one of these issues of reconciliation as to you can demand all the information of toxicology and all the geneticity tests and everything on everything if you want to. It's been pretty thoroughly studied in the Agency, and I don't think there is enough laboratory capability in all the country to do all that. So you have to draw a line as to how far can you go and still make a good judgment that there is no hazard, how far you have to go to make a judgment that there isn't any, and we are hopefully trying to find that point.

Any other questions? You must have asked them all this morning since most of the questions were on inventory.

MR. DARLING: Will your office be mailing out the inventory list when it becomes available?

MR. RITCH: I would hestitate to answer that in a categorical fashion. I'll tell you why. As Mr. Johnson pointed out this is a big document, and the best we have been able to find out even with fine print it's going to be about fifteen hundred pages and which means you're going to get a telephone book. How we're going to be able to get that around and make sure that everybody can see it is still being studied. We hope that we will be able to get many, many copies into the regions, and therefore, the regions can try to at least locate some copies at propitious points so the people can look at it.

It was also pointed out we're hopeful that perhaps because most of this will be in our data computer that there will be a way to at least bump against the computer to find out if you're on the list or not through just the telephone terminal system, but when the Federal Register told us it was going to be a quarter of a million dollars to put it in the register. That being about two and a half percent of our

budget, we had to stop.

MR. DARLING: My personal feeling is it will be completely unsatisfactory if working copies of that inventory list are not available to individuals within different companies. To go to the Regional Office would be impossible.

MR. RITCH: That's the point, but I think that is where we're struggling because if you take the lists of companies in the county and look at it and find that you have say nine hundred paint and coating manufacturers in the State of Washington alone and about forty percent of those I would say are under four people. We have got to get the word to some of them, but on the other hand putting that many -- that is paint and coating, when you think of plastics and adhesives and sealants and printing inks and all the rest of things that get involved, I don't think the United States mail could handle the problem.

MR. DARLING: The telephone company does it very successfully.

MR. RITCH: They make a lot of profit too.

MR. KRIKAU: I might suggest that the EPA could make good use of the trade associations

throughout the country. I'm not trying to put in a pitch for them. If you want to get the industry people, get to those trade associations.

MR. RITCH: Well, that is a good point. We have been making use of the trade associations, but still there are hundreds of companies that do not belong or are not associated with a trade association, and they are going to be involved and impinged upon by the Law. All I'm trying to bring out is that all these things are not easy.

MR. THOMPSON: The question is the budget for publication, the budget for distribution of the inventory?

MR. RITCH: Well, the cost that I cited was only for publication in the Federal Register. We pay for anything we put in the Federal Register. Everytime we notify them there is a meeting we have to slip them a little green.

MR. THOMPSON: You still haven't answered my question.

MR. RITCH: Then I don't know what your question is.

MR. THOMPSON: If my company wanted a copy of this list for physical retention in my office,

and I had my representative stop in your office, could we get a copy?

MR. RITCH: I don't know that yet. What I'm trying to answer is I don't know how many we will be able to get. We hope that will be the case if you're willing to do that. I'm not concerned about the people that can afford to do that. I'm concerned about Little Joe out in Kankakee, Illinois that is impinged by this that can't send a guy into Washington to pick it up.

See?

MR. THOMPSON: I think we have a very unduly Act if we can't get the information.

MR. RITCH: There was a choice there between asking everybody in the United States to send in what they made and then the Capitol couldn't hold that, and then sorting it out, and we decided on this method, and maybe it might be the worst of two evils, but we think it's a better one. We're going to make it work. We'll find a way to get it around, and we're hopeful that the regions and our trade association friends and other people who can get the word around for us will make everybody that is possibly impinged aware of the

fact there is an inventory and where they might with some degree of authority see it.

MR. COMEY: I will predict that there will be companies marketing this within two weeks. I will expect that tremendous profits will be made.

MR. RITCH: That is probably true.

MR. GRAY: My name is Mr. Gray, and I would like to propose the question you might answer for me.

The definition of a chemical under the Act is one that has a definite structure. In the chemical industry it is possible to make three or four different chemicals that might be on your list half of this by a co-condensation action or additional reaction and because of the probability of chemical reaction actually come up with a mixture of materials and not a single definite structure. I am assuming that is the intent of the Act that such a product would be one that should be listed on the inventory.

MR. RITCH: Well, I'm not sure that I'm enough of a chemist to know what you did, but I gathered you started out with some independent

chemicals.

MR. COMEY: If you want I could read the recommendations say. It says "The term 'mixture' would include certain reaction produced combinations of chemical substances which could have been manufactured for commercial purposes without a chemical reaction. To illustrate, a processor might combine two chemical substances, C and D which do not react to produce a mixture consistent with the basic definition of the term. On the other hand, it may be more efficient to mix the precursor substances of C together with D in one step. Thus, a processor may combine the chemical substances A, B, and D. The final product, a mixture of C and D, would be considered equivalent to the mixture made by directly combining C and D. Whether the process of combining the precursor chemical substances involves a chemical reaction is not strictly relevant to the determination of whether the product is a chemical substance or a mixture."

I don't know whether that answers your question.

MR. GRAY: It's the usual confusion.

What I'm talking about is that you can take a chemical compound that has let us say six reactives such as some of your sucrose and some of your sugars and react them with another chemical. You will get it reacting in one, two, three, four, or five places, and your final product is a combination, and it comes out on a probability curve. It might not be a strict probability curve.

I will be very specific. Let us take our dear friend melmac and melamine. Melamine has six reactive positions, and the literature will tell you when you react it with formaldehyde which are two of the main ingredients of melmac, that you get a reaction involving two formaldehydes with one melamine, three formaldehydes with one melamine, four formaldehydes with one melamine, and six formaldehydes with one melamine. Theoretically you can also have one and five, but you have got a mixture. It's a chemical reaction. It is not a blend of melamine and formaldehyde. The formaldehyde and the melamine are completely reacted, but you have got a mixture of different types of melamine and formaldehyde. You have got

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a di, tri, tetra, and hexa methaline formaldehyde or a methaline millimeter mixture.

I'm assuming that that final product is intended to be used on this list, but I'm a little confused about what I have been hearing about it.

MR. DENSLOW: I just got ahold of this thing this morning. I'm trying to find the exact wording, but the indications we have had in the past are that there is a problem in many, many areas like this, that one of the classifications we will have will be in reactions product of certain basic chemicals. We have this in many cases where for example inosculated means have been brought out. There are many, many chemically simply because of such resulted substances of the reaction can not be identified by a structure.

Of course there are many, many basic chemical substances that can be identified as a structure and one of your first comments had to do with talking about strict chemical substances.

If you notice the definition it does refer that a chemical substance -- I don't know the exact word -- is a part of a chemical reaction.

So I hope that helps you a bit. We are all trying to find a home on that list for some of these products which are otherwise difficult to identify.

MR. RITCH: Are there any other questions?

MR. HAYES: My name is Wayne Hayes of the Chemetron Corporation.

I would like to pursue Mr. Gray's comment here a little bit.

How would you propose for example to list linseed oil?

The question is how would I report these materials to you? Linseed oil is a very complex mixture of fatty acids. Do we list a chemical analysis of this by individual chemical compounds or list it as linseed oil?

MR. RITCH: Are you getting a feel on that Victor?

MR. DENSLOW: Looking at the draft here it says the identification definition of a chemical substance is of course any particular identity as well as any combination of such substances occurring in whole or in part as a result of a chemical reaction or occurring in nature.

I believe that linseed oil would

fall in that occurring in nature, and it is a rather -- should we say commercially definable material, standard material. I'm speaking for the EPA. If there is somebody that should be answering this please arise to the occasion.

This is the only indication we have had along the way.

MR. RITCH: Well, let me ask the first question what would you like to do? Just call it linseed oil and drop it?

MR. HAYES: I didn't ask the question for that purpose. I want to know what you know about it.

MR. RITCH: One reason we hold these meetings is to find out what you think. That is what I said earlier. We are just asking you. We have gotten some pretty constructive suggestions from the panel here. Maybe you didn't agree with them.

MR. HAYES: One of the things that I noted in the meeting this morning was that we are supposed to provide CAS numbers for these, and I'm sure since this is not a single chemical structure component, CAS does not have a number for this particular thing. You may have numbers for the

individual components.

MR. RITCH: Well, I think it says in the regulations if I'm not mistaken that you supply the CAS numbers if it's possible or if they are available, but you have a product that you think should be on the list, and you don't know how to define it you put it in, and we attempt to try to go the next step of giving it more identification.

MR. HAYES: Well, in that one particular instance as -- would the term linseed oil be meaningful to you?

MR. RITCH: Well, as Mr. Denslow said I think since it is a product occurring in nature, we will probably find that is meaningful and that people are familiar with it.

I don't know if you would probably give a different example. It is not quite so straightforward.

MR. RITCH: I have got one right here.

MR. DAVOLI: If you like in this Notice you have up there starting at the bottom of page 6 of the Federal Register it gives the definition of things that will be excluded starting right on the bottom of page 6 of the Federal Notice.

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MR. COMEY: "Since naturally occurring substances such as minerals, plants, and animal products are chemical substances within the meaning of the Act, these chemical substances must be included on the inventory. In Section 701.5 (d) (e), EPA proposes to exclude the general category of raw agricultural commodoties from reporting requirements and from pre-market notification requirements, at least initially. The broad category 'raw agricultural commodoties' will be included on the inventory. Accordingly, manufacturers or processors of raw agricultural, horticultural, and silvicultural products, such as unprocessed cotton, wood, wool, straw, oat hulls, and rawhides, would not report. However, processors who extract chemicals from raw agricultural commodoties (e.g., oils, fats, gums, and dyes) are subject to the reporting requirements for compilation of the inventory.

Similarly, certain raw materials in Appendix A of the candidate list will be excluded from reporting."

MR. RITCH: All right, ask your questions please.

MR. COOPER: My name is Gerald Cooper and I'm with DeSoto Incorporated.

I might be able to shed a little light on this problem of how you are going to list some natural products. I did see the draft working document the EPA was using to generate the initial inventory list, and it appeared to me that in this chem abstract approach there was going to be a certain hierarchical naming system starting out with the basic fatty acids and add whatever quantity that is being reacted on that type of system. So there may be some relief for linseed oils provided on the list.

MR. RITCH: Thank you.

MR. COFFNES: Damle Coffnes, Chemetron Corporation.

Are you going to publish the inventory list in types other than each individual compound that can solve problems?

For instance you have a mixture of hydrocarbons that are chlorinated and sold as one product, and it could be conceivable twenty, thirty, different compounds in it. So if you have your inventory list as a class of

compounds, this will solve the problem. I was not sure whether the inventory is going to be for each individual chemical entity.

MR. RITCH: Well, I think they have been broken down into -- I don't know whether it is two or three major classifications, those that have a different chemical structure and those that are falling within the category that you mentioned of some mixture of compounds resulting from a chlorination or hydrodination or something like that.

Then there are these miscellaneous things like gasoline which are a heterogeneous mess.

MR. SMITH: My name is Roger Smith. And I'm with the Packaging Corporation of America. I would like to pose the question of paper which is a large industry in the United States.

MR. RITCH: I want to point out at this time we're helping your industry too.

MR. SMITH: Paper is made from wood either by chemical or mechanical or a combination of these two methods, and I wonder if this would be considered a chemical substance or not.

MR. RITCH: I think you mean the paper as such.

MR. SMITH: Paper as such. I don't think some of the best scientists would stake their reputation on knowing the exact molecular structure.

MR. RITCH: I don't think that is going to fall into the category. I think that the chemical and so forth you used in the process will be on the list, but I don't think the end product of paper is going to be. I don't know unless somebody has strong feelings about it. I don't know whether we would be running into the situation of a toxic material or not. After all, we have got to keep in mind the end results of it. All we want to know is whether there is a hazard from the material.

MR. DENSLOW: I would suggest here that this is a perfect example of the kind of problem that needs to be worked out with the paper trade associations consulting with the EPA. The MCA would go through much and much soul searching to handle it for the particular industries we are familiar with. Other industries such as petroleum are having

to handle their own problems, and it sounds like another one, it is a tough question. I would suggest getting the trade associations on top of it.

MR. KRIKAU: I might comment on that too. My particular company handles a lot of coal tar. Now coal tar -- I don't think many people would dispute the fact that it has got toxic properties to it. Yet for the last fifty years, some fifty years, the smartest scientists in the world have tried to analyze coal tar, and no one has succeeded yet.

MR. COFFNES: This gentlemen's question about the wood product has already been answered.

Accordingly, manufacturers or processors of raw agricultural, horticultural, and silvicultural products, such as unprocessed cotton, wood, wool, straw, oat hulls, and rawhides, would not report, but if one does process it would have to list the process materials, not necessarily the components of wood, and that is in the Federal Notice. It's on page 7.

MR. RITCH: Thank you.

Anybody else?

To wind this session up we are going to have a break for about ten minutes.

But to wind this session up I would like to point out to you that on February 15th in the Federal Register we announced that a document would be forthcoming that would be available since at the time we didn't have a tremendously large mailing list -- it's developing all the time -- that is relative to the strategy for implementing TSCA. Now in the last two or three days this paper has been issued, and the Federal Register did announce that the paper would be available, and we have gotten hundreds of requests for the paper, and there are a lot of them in the mail. In fact, I see a lot of people here that I happen to know, and I know they are on the mailing list. They will get the strategy discussion paper.

There is going to be an open meeting in Washington on March 22nd and 3rd to discuss the strategy for implementing TSCA. Maybe at that point some of these major problems will have to be settled as to whether we're basically going in the right direction, but if after a few days your company does not get it or whoever you are, I don't

mean to define it down to industry, but environmental groups, or state officials, or trade associations you don't have a copy of this you can call my office or write them, and we will send you one. It can be done now at this stage. We can get it out the same day you notify us. My phone number is on that sheet of paper that was in the lobby. In case you didn't get it it is 202-755-0535, and if you want a copy of that strategy paper you can get one. The region also has a few, but I don't know -- probably not over a hundred at this stage. So not everybody in here -- I think those of you ought to wait a couple of days and make sure your organization determines whether you are to get one automatically from our mailing list.

If there are no further questions, we will take a break now, and I think they're going to reconvene in here in about ten minutes.

(WHEREUPON, A SHORT RECESS WAS HAD.)

MR. DUPREY: The purpose of this particular part of our session is to summarize the two concurrent sessions that were just held so that those people who weren't able to attend one or the other

are able to hear what we discussed. Basically these will be very brief presentations on what happened in the sessions. If there is some time for questions at this time we'll go to questions. However, I would like to try to get back on our schedule so that at 3:30 we can begin the panel discussion on regional toxic substance problems.

I will ask that each of the sessions we will try to summarize about ten minutes apiece, and we'll start with John Hesse from the State of Michigan who will summarize the session on State Program Roles and Toxic Substances.

MR. HESSE: Well, in our session we had representatives from three states represented on our panel representing Illinois, Wisconsin, and Michigan. I noted that of the three states only Wisconsin has at this point designated a lead agency for TSCA activities at the state level. We're thinking about this in Michigan at this point, but it has not been placed in any particular agency yet. Each of the states reviewed their existing programs dealing with toxic substances. I don't want to go into all of these. They are basically control of -- directed toward

the control of discharges, emissions, or disposal and sometimes we talked about monitoring to a certain degree.

Whereas TSCA of course addresses the manufacturing and control of the use through such things as labeling. So that we felt in general that the Federal Act or the Federal implementation and the state activities are fairly complimentary.

Wisconsin and Michigan both described our PCB legislation and compared it a little bit to the Federal actions on PCB under TSCA. Michigan's PCB Act goes into effect in April, April 1 of this year. So that's only about a month away. Wisconsin's goes into effect essentially in July, and we both are feeling uncertainties about how TSCA will affect our state programs. We noted Section 18 in terms of the preemption clause on state programs dealing with PCB's. We are wondering -- we're concerned I guess that where our State Act legislation goes beyond TSCA we hope that we'll be granted exemption from the preemption clause. We were looking for some assurance that we would. We also have concerns over portions of our Act

that also are addressed by TSCA in terms of like the labeling and disposal. We have to go ahead and implement something at this stage because we are ahead of TSCA. Yet we feel that maybe our approaches to labeling and disposal may be different than what will come out of the regulations from TSCA.

There was considerable discussion made concerning possible conflicts or duplication of effort between the EPA and the states. I have mentioned about Michigan's possible plan to create a Toxic Substance Control Commission, and this bill that has been introduced was talking about surveying toxic materials coming into the state and products used in Michigan. Well, this is indeed an area of duplication, and we feel that it would be to everybody's advantage to reduce the amounts of duplication as much as possible. This list discussed how we could do this, and Mr. Duprey felt particularly that we could perhaps come up with informal working agreements between EPA at the regional level and the states rather than having to -- well, the point was made that the TSCA does not address delegations to the states in anyway so

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we were thinking that this had to be done simply by an informal agreement.

Someone wondered really how much support the states could lend. How much the states could lend with our deficiencies in manpower available to work in toxic material problems considering that EPA feels that they will be adding two hundred and sixty staff members, and they really feel it would take thousands to implement what kind of impact the state really could have. Well, the states responded in that we feel that our priorities will likely be shifted to a certain degree to work more completely into this area of toxic material problems, and that we will be able to compliment the Federal activities very well because we have personnel already in place and we're physically closer and more familiar with the problems.

We also have more experience working directly with the industries that would be regulated in our states. It's generally believed by the states and on the panel at least that the 1.5 million dollars subject to grants for state programs will not go very far toward the supple-

merting of our program. By the time you split it up between the states on a population basis we're talking about maybe twenty-five or thirty thousand dollars a year, and that might amount to one person.

We would accept it if we could get it.

A great deal of concern was voiced about the lack of adequate disposal sites to handle the large volume of toxic waste. This brought up the fact that there has been a Resource Conservation and Recovery Act passed in 1976 that does address this, and there is going to be a conference coming up in late March dealing with that Act specifically.

The states did present the opinion that TSCA may lend the support necessary to prevent problems such as our PBB's or that type of a thing in the state rather than us always trying to correct problems after the facts. So we are looking forward to participating with the EPA in anyway we can get it worked out.

Basically that's all I can summarize in a short period of time I had to pull it together.

MR. DUPREY: Thank you, John, I think that was an excellent summary of my memory of the session.

Okay, we'll now return to John Ritch to summarize the session on the inventory and testing.

MR. RITCH: Since the subject of the inventory and pre-market notification was pretty well discussed at the morning session we used most of our session or rather at least a fair portion of our session to have the panel members provide statements representative of different segments of industry.

A Mr. Fred Krikau of Interlake who has been on the Illinois Industry Task Force on Regulated Substances gave an interesting summary, and I think it is going to come out in the State Report of their -- I guess you call it a census of the chemical industries in Illinois and various situations that they discovered all of which was I think fairly indicative that regulation in the chemical industry is somewhat needed.

Mr. Ken Brown of Sherwin Williams of course representing another type of industry

summarized some philosophical viewpoints of his view of the Act, and I guess the most important one to me was when he said whatever I'd put out of my office I should be prepared to substantiate so that I don't run into any libel suits.

In other words if industry or anybody else is advised of what the EPA's stand is, it should be supportable and therefore usable by the recipient, and I would concur.

Mr. Victor Denslow of the Amoco Chemical Corporation who is personally a member of plastics and therefore represents another segment of industry, had some very specific recommendations for modification of the Act, and in order to insure that I don't distort these I have asked Victor to come up in a couple of three minutes to summarize what he recommended.

He was speaking not only for his company, but for the Manufacturing Chemists Association in Illinois group, I believe.

MR. DENSLOW: Making short speeches is hell.

We had several particular points we did point out that everything is a chemical or a chemical substance, and that this Act will thereby

reach into almost everything we have or can potentially reach, that much work is going to be needed to be done and much care to assess the consequences of rules and regulations.

We suggested in regards to confidential information that the EPA perhaps could have an unpublished confidential listing giving all the structures and everything such that people could call in and at least ask if a certain substance that they don't find on the published list might be on the confidential list.

We generally concurred about the not listing waste streams on the inventory list. I believe that is understood that is one of the EPA's intents. However, we should make sure that such waste streams are never considered to be a new chemical substance which the Act does permit the product of a chemical reaction and not only something we list as a chemical substance.

So we propose there be a regulatory language specifically excluding those streams ever being considered a new substance and backfiring for example on a new venture or new operation.

We did suggest to the Technical Assistance Office that the advice coming out of there should be legally usable and usable as a legal defense by people obtaining information as contrasted to the Internal Revenue Service on problems we have had for years.

In regards to small quantities in the exemption Section 5A pre-marketing notification for materials during research and development there is a small quantity reference in the Act. I think it's unrealistic to come out in specific numbers testing an evaluation and even market testing because this is such a variable thing in industry, and real numbers become almost unrealistic.

We have concern with some suggestions that the wording be such as to protect against it. I won't take time to read all through it, but the amounts should only be the amounts reasonable for the purpose and that they always be under the supervision of technically qualified individuals who know what they are doing.

In many parts of the Act there are places where if each manufacturer were required to

develop information on the total volumes in certain uses health and environmental data and numbers of people exposed and various other things, if you had say ten manufacturers of a given chemical, it would be highly duplicative and very cost prohibitive for each one of them to come up with the same information. So we are suggesting that a provision be made by the EPA to accept such joint activity and perhaps look into the anti-trust advocations of that and make arrangements for it.

I certainly would like to emphasize the test data is only data and many other considerations before you come to the point of judging the risk and arriving at what is an acceptable risk and regulating therefrom. So we particularly urge everyone not to make preemptory judgments on a particular situation just based on the toxicity tests.

I think strongly we're going to have to somehow address this matter of defining in some sort of a quantitative or semi-quantitative way of defining unreasonable risk and substantial risk. We just don't know how to operate in a rational and consistent manner without going insofar as

numbers of percentages or what population is likely to be affected or something.

Then we suggested that any numbers in the regulations take into account metrication. Metrication is coming and any quantities listed should include the metric equivalent or be written in metric terms otherwise at some point in the future the regulations so far will probably have to be pulled back and revised and re-issued and perhaps go through additional hearing procedures.

So that is the substance of our written recommendation.

MR. RITCH: Thank you, Victor.

Is David Comey here?

Our fourth panelist was Mr. David Comey who was representing the Citizens for a Better Environment, and therefore represented an entirely new view.

Here he comes, and so he had some suggestions particularly relative to our forthcoming regulation on the inventory list, and I thought I'd ask him to take two or three minutes to summarize his recommendation so I don't get accused of distortion.

MR. COMEY: Basically what I recommended was that a true inventory be produced, not just a list of chemicals that are being used, but a listing which would incorporate information about production levels, the use of which the chemicals are being put, and other data such as who is manufacturing, who is processing, who is storing it, what facilities it adopts, and what amounts because one of the speakers on the panel had pointed out here in Illinois such an inventory had been done in connection with some regulations in toxic substances, the Illinois Pollution Control Board now has under consideration and had some very interesting facts.

It seems to me it's almost impossible to make an assessment in the future of what a significant use is unless you know from sort of a day-to-day basis what the uses are.

I also made a recommendation concerning the confidentiality of what EPA is proposing to do is allow manufacturers to submit generic names rather than specific names, and this I do not think would be sufficient, would not allow the health and safety commissions to be applied.

So what I suggested was that when all of the information is submitted to EPA, and EPA then makes it publicly available then remove the manufacturers name from the date it is published so that this would make it more difficult for competitors to crack down on who was using what and why.

A gentleman did point out to me afterwards many of the these things are patent, and a clever person working through the patent could figure out who the manufacturer was. I don't have a quick and dirty answer to the confidentiality issue. I would suggest those of you who really consider this to be an extremely working aspect of this whole Act, consider what degree of confidentiality you really need and how you go about giving the access to the Agency or to the public they need to assess the toxicity of the chemicals that you handle.

MR. RITCH: Thank you, very much, David.

Following the presentation by the panel members we had some additional questions particularly pertaining to the availability of the inventory, and I think it is well to repeat

this morning that -- or this afternoon what was said this morning. We have the broad job of trying to make the candidate inventory list, however it comes out available to all of the people that can be impacted by the Law as a manufacturer or a processor. Now it's one thing to make lots of copies available and have them in places, but you don't know whether you're getting to everybody in the far reaches of the interlands as to whether they have seen the inventory, and they may be the only producers of some chemicals. So our job is kind of cut out for us the next couple of weeks to decide the best way of publishing this, distributing this, making it available, and making it so that any small organization in the country can know what they should be looking at it and taking whatever action is pertinent.

There are a lot of questions then on the subject of these -- I guess you call it heterogeneous messes they just get into the situation where you have reaction types and so forth and although the forthcoming regulations try to clarify this point, I'm sure this is going

to be an area where it would be well if anybody here could comment as Mr. Johnson said this morning we welcome your comments on some of these definitions because we don't know the answer to the substantial risk definition. We don't know the answer to the significant new use definition and the small business definition and so forth. So any of these things you can make a contribution to and characterizing it which you think is a more clear definition of mixtures and other things will be most helpful, and then this comes out in the Federal Register next week and is distributed further, we would welcome your comments.

I think that concludes it, Bob.

MR. DUPREY: Thank you, very much.

Jim, Jim McDonnell, head of our Enforcement Division and his panel, if they could come up. I think we already have your signs in place, and I already have a question for you. I'm going to turn it over to this panel for resolution.

MR. McDONNELL: My name is Jim McDonnell. I'm the Director of Enforcement for the Midwest Region of the U. S. EPA, and I have got a few things

to say, and I think the panel does.

It is going to be a little bit different from some of the comments that were made earlier today, and I think the difference is going to be largely in what happens to the toxic substances when they get up there, and really why we are all here and why the Toxic Substance Act itself was passed and why other legislation is on the books to control toxic substances.

So far today I think we have talked largely on procedures and some very important procedures for getting the Act in order, but our comments are going to start zeroing in with I think some very interesting observations and concerns from what I think is a very distinguished panel, and I will introduce each of them after I conclude my opening remarks.

You know in enforcement from my own standpoint and not everybody here is enforcement, but in enforcement you sort of take the problem as it is. Usually I get involved in a problem or my staff gets involved in a problem because it is a problem. It's at the end of a

pipe, or in the air, or in the water, or it's in the sediment. It's there, and then we come in and try to remedy it.

The great thing about TSCA is that in a sense it is going to bridge a gap in that TSCA is going to eliminate some of the problems that traditionally enforcement has been involved in, but we're going to have I think toxic substances problems for a good number of years no matter how well TSCA works or how well the existing legislation has been in place for some years works now and in the future. This region in particular has been affected maybe more than any other region because of the vast water resources it has, the great industrial base it has, and I think maybe the number of inquisitive people it also has, some of which are represented on the panel today.

We have had DDT here in a big way. We have had PCB's, asbestos, mercury, you name it, I think we have had it. I find in my job that hardly a week goes by in our region but what some new or old toxic substance or chemical substance is identified as an actual or as a

potential threat to the people and to the ecology of this particular region.

I also find this as we control some of the heavy stuff or stuff where seven or eight years ago K. C. Buckder of the Tribune dipped his hand in the Ann Harbor Canal and came out with a hand and a arm that was coated with oil. He can't do that today. Some days he can, but it's an exception rather than a rule. The heavy stuff that is floating, the debris, in the south of us except for storm water overflows which are a big problem which we still haven't solved. That stuff is being controlled more and more at the source, and it will be that type of problem in the past largely assumed by the regulatory agencies and the people that were making the discharges of waste. So we are controlling these now.

So what happens is the more insidious waste, the toxics, that you can't see many times, you can't smell, you don't even know they're there innocently are going out into our air or our water and into the land. So more and more concentration is being paid on what the substances are doing,

and really what we don't know about them, and we don't know if any of you in industry or otherwise present today know, we don't know much about many of these substances.

The toxics also in my experience seem to be everywhere. We have stopped being surprised by where we find them, but in many instances we have come to expect them. We look for one substance, and we find another where we looked several years ago. And the levels of detectability we had at that time have been improved so now we find them. A couple of years ago we didn't. Maybe in the future we will find even more as our detectability gets even better. It's somewhat of a never ending process from that standpoint.

From the beginning of the '70's we have had various environmental laws enacted, and it sounds like alphabet soup. We have had the FYBCA, and the CCA, and the STWA, and the FIFRA. It sounds like the depression is resurrected.

All of these, the Water Act, the Clean Air Act, and the Pesticides Act are relatively new Acts. The resource recovery, the resource

conservation, and Resource Recovery Act and the Drinking Water Act have resulted in some very, very limited successes with toxic substances. We have made some attacks, but I think mostly today with our quest to get the heavy stuff out, to get the solids out, to get the oil out, to get the visual pollution out, the smokestacks, that we have not gotten much done in the way of toxic control. At least I don't feel we have. We haven't known much about it.

In the first run of permits for the Water Program for example I think the dischargers in most cases have scant knowledge of what was going out in terms of toxics. This time around as we get to the second generation of permits obviously all of us are a little bit smarter. We have a better method of knowing what we ought to be looking at, and all of us have to look at more in terms of what is in our waste, and then actually do something about it by way of controlling it.

So we see more on the horizon by way of successes that are going to be coming up in the future if you judge success by keeping the

toxics out of the air, and the land, and the water when you can control it in another fashion and more deliberate fashion. We know one thing. We know that the toxic's program however you look at it whether from the standpoint of the new Toxic Substance Control Act or through the Water Act or the Clean Air Act or the Drinking Water Act, it's a very costly, time consuming, very, very, intensive operation.

In all of my experience in enforcement I have never seen anything that takes as much time and as much effort on one particular industry or city that may be discharging a toxic substance or one type of a toxic substance that transcends many industries, the type of manpower this takes to come up with first, the identification of how widespread it is, and then what do you do with it. Sometimes we find we don't know what we're going to do with it, and we're learning more there.

I think because of some of these problems we have had in the past the fact that the New Toxic Substance Law is here which really as I view it is a Law designed to prevent some

of the end of the pipe problems, some of the stack problems, some of the things that people call the little timebombs that are being deposited in disposal sites around the nation are ultimately going to catch up with us. It is really designed, I think, the New Toxic Substance Act, to bridge the gap in the after-the-fact Laws and that is largely -- I know what I have been dealing with so far and to date in terms of enforcement. Such Laws that we have had call and will in the future, TSCA isn't going to revolutionize our approach to traditional enforcement, and such Laws do call for a case by case assessment, much, much generally unavailable manpower, and many opportunities for delay by recalcitrants, dischargers, or dischargers who say "Prove it to me before I take this substance out of my waste."

There is much competition for investigating parts of the enforcement effort that are simpler and easier. Almost anything is easier to get into from an enforcement standpoint and to build a case on on toxic substances, and that is because it is difficult to link up specifically what that toxic substance is doing.

I think the Reserve Mining Case is a classic case where the Federal Government and the State Government probably never marshalled as much by way of testimony and investigation in showing the harmful effects of asbestos to human beings, and that case sort of ended up in the Appeals Court saying "Well, bring me the cadavers first before we are really convinced." I think because of the New Toxic Substances Act what happened in the Environmental Protection Agency is what really -- for the first time in my experience the Agency is starting to get its Act together on toxics, starting to think of a so-called more integrated approach that is if something is coming out of an industrial discharge pipe or a municipal pipe in the water, what is happening in the air in that facility, what is happening with the residual matter that ends up in the sediment. We're starting to look at maybe taking the resources we have and trying the priorities and marshall these substances to better solve some of the problems that are already out there, and then take off from this approach that we have had increasing particularly in the last

year to two years what some people have come to call the crises pollutant of the month or the week, and sometimes it gets down to the day.

When I go into the office in the morning I think on the way down. I wonder what it will be today, a continuation of yesterday's important crises pollutant or will we have a new one generally. I'm not surprised on what happens. So we're going to try for a more planned approach from that standpoint. We also I think to get that more planned approach we need sessions like we're having here today, and I think particularly we need the expertise that is represented by this panel. They took time out today to come to this panel. I would like to introduce the panel to give you some indication of the type of expertise that is here.

On my immediate right we have Jake Dumelle. I have known Jake for a number of years. I have known of his commitment to pollution control and his interest in it long before others in the problems caused by toxic substances, and think in some sense he was thinking of toxics and what we ought to be doing about them when

everybody else including myself was thinking of the stuff you could see and touch and feel. So I think the day of Jake Dumelle is starting to materialize when we get the type of effort that is now going to be undertaken in this country. Jake is the Chairman of the Illinois Pollution Board and one of its original members when this Board launched its pioneering efforts in 1970, and he brings a vast amount of experience as a former City Manager and an Assistant to a U. S. Senator and having worked in predecessor agencies of the U. S. EPA right here in Chicago. His qualifications I think speak for themselves, and he is in a day-by-day combat on this pollution as Chairman of the Illinois Pollution Control Board.

Next to Mr. Dumelle we have a gentleman I have just met personally. I have talked to him for the first time today. Mr. Bill Petrich.

Bill is the head of the Environmental Clearing House Organization, and he is also the Executive Director of the Liquid Waste Control Association waste haulers, a whole new industry

really that is burgeoning in this particular area of the country and in other areas of the country and with lots of concern about what this industry is doing both from how it's organizing itself and from the standpoint of such things as resource recovery, and Bill will tell you more on that.

He is also active in the American Chemical Association, and I think that demonstrates today and will to you the type of awareness he has as a worker and director in the field of waste hauling and then also within environmental consideration to go with that. I think he wears that suit well.

Next to Bill we have another Bill. Doctor Bill Brungs, and Bill is with our U. S. EPA Environmental Research Lab in Duluth, Minnesota. I have seen him in enforcement situations over the years where we have called upon him for the expertise that he possesses as a fisheries biologist and probably is second to none in terms of his knowledge of criteria and standards relating to water quality and particularly to the effects that discharges and toxics have upon fisheries

and biological life.

We have finally another gentleman who represents the academic community. And that is Doctor Tom Murphy who is a chemist at DePaul University, and I think Tom has somewhat of the mold also of Jake in that I have heard him for some years express his interest in toxics particularly on the air side of toxics and what happens when some of the toxic substances settle into Lake Michigan or what body of water he is currently directing to measure PCB concentration in rainfall in Lake Michigan. He's also on the Board of Directors of the Lake Michigan Federation, and I think Tom has had a long and notable involvement in the subjects at hand today.

Without further adieu I would like to first introduce Bill Petrich to lead off.

Each speaker will have up to ten minutes and then we will try to open it up for questions if you have any. We will take the questions at the end.

MR. PETRICH: My name is Bill Petrich and I'm the President of ECO Environmental Clearing House Organization and I'm Executive of the

Liquid Waste Control Association.

Very briefly in that time allotted we started out working about five years ago when one and upon the same day the City of Chicago and the State of Illinois in their ultimate wisdom closed all the landfills with the acceptance of liquid waste. Whereupon my phone began to ring, and I had thirty-six fellows who called Liquid Waste to say where do we put it which created the kind of dilemma that led to the formation of the Liquid Waste Control Association.

We confronted the State and City with our dilemma and really as agents of the manufacturers who we represented and discussed the question with them of where do we put it. They then reopened the landfills under some specific preliminary guidelines and as much as the Apollo crew said on their fateful day at Houston "We may have a problem." So we all sat down and decided how to attack this.

We raised three basic questions at the time. Number one, how much was out there. No one at that point five years ago had any idea what volumes of liquid it was we were talking about.

Indeed in the Environmental Protection Act that was passed in 1970 the word liquid waste didn't even appear. We raised the issue what do we do about liquid waste, and everybody just assumed that it went to the Sanitary District. We sat down and said how much is out there. The second question we said what is it chemically which came to the point what are we really dealing with, and third, what should we do with it in terms of not only the environmental impact, but predicated on what we are taking away, what kind of waste is this.

Some of us who had been involved in solid waste recognized the amount of refuse developed in each family in America had gone from something like two and a half pounds per day to something like eight pounds per day. We knew we were wasteful at home, but we didn't realize industry was as wasteful as we were. So we began a systematic analysis of each type of material carried by these haulers as they went to landfills because up to that point they had no understanding of what was in the tank that they were driving from the generator's location to the

landfill. We learned some interesting things over the four year period.

We ran some systematic analyses by each industry chat we serviced, and then we went immediately to the chemistry. We finally out of all the data developed the waste into eight basic classifications which still hold rather firmly today. We grouped industries that the men were servicing on the basis of the kinds of materials we would find in the waste.

Giving you a minute on the waste, those of you who have attended environmental equipment shows can get a feeling for this. If you looked at some rather elaborate piece of equipment designed to clean up waste water, and it has just a gathering of valves and gauges, et cetera, and beautiful blueprints, and there's a nice little model working there bubbling up and down, and then at the bottom at the corner they have a little two-inch pipe, and the pipe says "To waste," and that is where we start at that point.

So what our work has done is shown what there is in the State of Illinois based upon this work, and we don't do this work alone. We

worked with the City of Chicago, with Cook County, and with the State of Illinois very closely, and with the Federal Government, recognizing if there were going to be regulations developed in this area they should really include everybody involved, that is the generator of the waste, the fellow who hauled the waste, and the fellow who is responsible for the ultimate receipt of the waste, and what he's going to do with it.

Our basic philosophy in the Association being one of cooperation we kind of felt that all Laws should be done this way. They ought to regulate on the basis of everybody involved. So through the good efforts of people like Ken Brown from the Calumet Area Industrial Loan Commission, Vic Denslow from the Illinois Chamber and Environmental Group, people from the Chicago Chamber, the IMA, Malcolm Chester, we went to them and said "What are your problems, what problems do you have relative to getting rid of this waste."

Because if you look at it from the manufacturer's standpoint he is producing a product he has to sell, and as much as we are

at home, his refuse, his effluent is an irritant at best. It's just something that is there. Now it's become more than that of course as it has become more than that at home. So we had input from the manufacturers. We had some feeling for the twelve to fourteen different industries we serviced in Northern Illinois and Northwestern Indiana because the predominant amount of this waste we're talking about comes from that area. We talk about a crescent that runs Southeast Illinois, East Chicago to Northwestern Indiana that we affectionately call the State of Calumet. This is the predominant source. Unfortunately by the State of Calumet you have got another State line. You have got Illinois and Indiana. So we have to call up J. Goldstein at Region 5 and say you're the only guy that handles both of them. We have to deal with them individually.

One of the things we learned was that there was waste generated out there that is not hazardous to anybody. It is not toxic to anybody, what we call the soapy water streams.

The people in the food manufacturing

business for instance the processing in bakery, the processing of food generally, some rather substantial companies who produce an effluent that is not acceptable to the Sanitary District because of the solid contents that go into the sewer, but if it hauled away by one of our haulers and put into a landfill it is not going to hurt anyone. From all of the analytical works of these eight classes of waste, we elicit one of the real bad actors. This of course was our Class 7, the electro-platers in the electronic industry. We have now worked again with the State sitting down with the electro-platers on the Task Force announcing to them they're not making chocolate bars, that the waste they produce is rather very toxic, and this is one of the bugaboos in our industry is what to do with that substance.

There seems to be a rather direct ratio between how difficult or how toxic a material, a waste material, is and how difficult it is to throw it away which brings me to another point. All of you being involved in the environment, I am sure you all recognize there is no way to throw

anything away. So don't throw anything away anymore. There is no more away.

Consequently the upshot of our work which is continuing is to take the materials and its so-called waste from the manufacturers within these fourteen industries and isolate chemically what this material is. The most encouraging upshot of that work has been the fact we have been able to elicit what we call the energy bearing waste. These are wastes that come from the paint, ink, coating industries that are involved in graphic arts and printing whose waste stream is a composition of materials and at the flash point have some BTU value, and in that sense are energy bearing. They are adulterated at that point with pigments and with other materials inorganic in nature not contributing to the energy value. We are in the process of eliciting the energy bearing portion of a waste stream and moving it into a market place called secondary fuel.

We were fortunate this winter as severe as it was to keep two companies in Central Indiana functioning, operating where they were

turned off their gas in October, 1976. They had been allowed to function and operate their plants all winter long by virtue of the amount of the volume of secondary fuel we have been able to send to them. So every opportunity we have to extract from the waste those materials which we determine to be redeemable, we have done two things.

We hoped we conservationally helped the energy in this instance, and secondly we have kept it out of the land where it would be an environmental problem. We're moving ahead not only in the area of Class 1 which is paint, coatings, adhesives, inks, and graphic art, but also what we called Class 6 which are petro-chemical streams, oils, secondary oils, machine oils, and cutting oils. In 1974 we assisted in a study in the United States that showed we are throwing away 2.2 billion gallons of oils annually. This was not even counting the oil that was taken from the crankcases in your cars. This was industrial oil. It does not make any good sense to me or anybody sitting here to give the Mideast Countries twenty-eight billion dollars of our

money and throw away 2.2 billion gallons of oil. It doesn't make good sense. So we have helped spawn and support companies who are in the recovery of oil if only for secondary fuel or if only for fuel itself.

Oil as many of you know does not necessarily break down when it gets contaminated. It gets dirty. It can be cleaned and can be filtered. In addition to that we have petroleum oil streams from industry coming out that fall into the highest specification category, specifically hydraulic oils, hydraulic oils that are used in discharge and then end up in secondary fuel, present us with a tragedy. We need that hydraulic oil. It is infinitely more expensive than normal oil. Those streams should be redirected to someone who is going to refine them and send them back in industry as hydraulic oil. Everybody that has been involved in manufacturing knows you can run out of fuel and be replaced, but you can't run out of oil. We need oil.

This program of recovery, research recovery and conservation was done as a result of the analytical work we have done. One of the

major areas that seems to be coming up now from Class 3 are these phenomenal volumes of trickling acids and other treatment mineral acids which contain on occasion extremely substantial quantities of chrome. They control nickel, magnesium, lead, and other metals as well as chrome. Chrome is significant. We are currently in the posture where there is no more chrome in the United States of America.

Most of our chrome as I understand it from reading the papers is from Rhodesia, and Eon Smith is buying business in Russian insurance. So we have that problem to confront. It doesn't make good sense to throw chrome away into the land and then go back and pay exhorbitant prices they are going to charge us for chrome. You can't make hardened case steel without chrome. We have a magnesium problem in the United States. We are completely out or very short right now. I understand just a few weeks ago that Chile and Venezuela have formed a corporative to sell magnesium to the United States. We're going to have another OPEC situation or Uncle Sam will have to buy the raw material, and we will have to pay

the price for it. So these are just some of the areas.

Another area we're involved in is the recovery of organic edibles. I mentioned earlier about food great waste in our Class 2.

We have rather substantial quantities of vegetable oils being discharged as a sludge slur. Some of these oils which waste streams are constantly some eighteen to twenty-two percent recoverable cotton seed, corn, and soil, all of which cannot necessarily go back into feed because they maybe adulterated with dieldrin and other contaminants, but they certainly can be conservated into fatty acids which are used by the chemical industry.

The bottom line of this is to sit back and really reflect on it. All the material on this planet is used for two things. We either eat it or we build with it. We either eat the material or we build with it, and with the area of "Waste" what is one man's waste is certainly potentially another man's raw material. I think it is on that direction that we ought to look.

Thank you.

MR. McDONNELL: Thank you for a different viewpoint.

Next is Doctor Bill Brungs.

MR. BRUNGS: We're sitting up here playing Russian roulette. We don't know who is the next one on the program. I think we're all prepared.

I think I would like to clarify one little point. I'm from the Environmental Research Laboratory in Duluth which is part of the EPA and is in the office of Research and Development. We're not in the office of Toxic Substances yet. We may well be sometime. So whatever I have to say may not jive with what the office of Toxic Substances may say next week.

I want to specify also that my experience is in aquatic life toxicity works so if what I say may not sound like we're trying to worry about humans, that is because someone else has that responsibility.

I have been in this field of Environmental Protection for quite awhile now, and for about ten years we have fought like heck trying to come up with water quality criteria and water quality standards in receiving water,

and after doing this for quite awhile we get a fair amount of information. We come up with recommendations, Public Law 2500 such and such, and then we're all bogged down in the old problem of mixing groups. We don't know where they apply. The burden of data generation is on the Federal Agencies which maybe over a period of ten years come up with information on forty or fifty chemicals. Then sort of a very much of a losing battle we have been accomplishing things. We have assisted in the generation of Laws and regulations, but they're certainly not the ones we will have to have over the next generation, or our generation if we have one.

The thing that I think that is going to be most pertinent again to aquatic life in relation to TSCA possibly is the residue problem. We have been analyzing fish tissue in the Great Lakes like many Federal Agencies for quite awhile, and every year we get a new set of instrumentation which gives us another new list of chemicals that were found. If you were to take everybody's list and put them together now on a positively identified chemicals from fish

of the Great Lakes I'm sure that no one here would care to eat them tonight if you happened to go to a restaurant.

We don't know what it means. We come up with chemicals. We don't know where they come from. We don't know who used them. Somethings are really ridiculous. We find chemicals we are told were only used as a whitening agent in toothpaste. Somehow it's getting into the Great Lakes, it's getting to the fish. We don't know what they made, and any attempt to make sense out of it is kind of fruitless right now because we're obviously not going to sit down and work up complex water quality criteria running two year life criteria while two hundred organic chemicals we find in fish because we don't know what it really means. It would be nice sometime to know where they even come from.

With regard to TSCA I think the best thing I like about it now is that it does put the burden of proof on the manufacturer or the formulater and so forth, and I think what this will let us do now to create a much greater manpower pool that will generate information that

will help properly govern the use of the materials in the environment.

I am involved quite a bit with the International Joint Commission which is a coordination of efforts between the U. S. and Canada and the Great Lakes. They I think either passed or soon will be passing something comparable to TSCA. I haven't had the chance to sit down and read it, but those of you who have had contracts or companies on both sides, you might want to look into that too. I have a strong feeling there is going to be a significant difference between the two.

The area I'm most interested in though is the toxicity testing then for aquatic life is going to become eventually a part of TSCA's regulations. The thing which I see most important coming out as specified in the Law, short term screening methods. This sounds like a dirty way to come up with information, but there is surprisingly quite a bit of procedures that have been used some with varying degrees of qualifications in an attempt to estimate low term chronic effects on aquatic life. We have -- I

don't know if any of you have ever heard of the coughing fish test. This sounds ridiculous but it is a potential short term method. And the way TSCA is written there is going to be a research program to develop and verified shortcut screening methods. This includes methods that would predict long term final accumulation. There are procedures now like calculate the partition coefficient. You can come very close to predicting the potential bio-accumulation in fish over a long period of time.

Such activity is something that we as biologists have not heard about in all of our training, but now our chemists start talking to us and say "Hey, this looks like a great way you might come up with some shortcut procedures, a quick way to screen large numbers of chemical substances."

The problem I see right now is that not just the chemical manufacturing industry, but many people need this kind of information. If there were a nice way to sit down just not only with the EPA, but other Federal regulatory agencies and come up with industry, with manu-

facturing chemists or somebody, sit down and come up with some -- quickly now, not a five year program but sit down quickly and come up with some kinds of testing protocol it would apply not only to the TSCA requirements, but would provide a procedure that would be specified effluent guidelines or the MPDES Program, a whole host of areas like that where everybody is using the same general procedures with modification I'm sure if necessary, but if that were to be done I think it would end up in the future with less cries about lack of data, lack of information, and also the non-standardization of toxicity testing methods.

We're going to be around all evening. Our time is kind of short. If you have got any questions I'll be here all of tonight and part of tomorrow morning, but the main cry I put out is that we somehow can coordinate the toxicity testing procedures so that it will not be a waste of money. We'll have data when we need it, and hopefully in the long term, five years from now we'll look back on this and see we weren't in such an adversary situation as we might think we are at this time.

Thank you.

MR. McDONNELL: Thank you very much, Bill.

Now on to Doctor Tom Murphy of DePaul.

MR. MURPHY: Thank you. I just want to take a few minutes to look at some of the problems of toxic materials in the region.

The Toxic Substance Control Act is directed towards materials presently being manufactured or to materials being introduced into the marketplace in the future.

However, there is a big need for such legislation, and if implemented properly the bill should go a long way in preventing many future problems with toxic substances. However, it does not address all the problems with toxic substances and because we now have the bill on toxic substances we should not neglect these other problems which presently exist and may continue to exist.

A great problem that I see that is not addressed is that of toxic substances already in the environment. This includes such problems as arsenic insecticides which have been

sprayed on farmlands and also disposed of in open disposal sites in Wisconsin and other rural areas. Also polychlorinated biphenyls which are present in high concentrations in fish and biota, a number of fresh water systems, and including Lake Michigan, polybrominated biphenyls which are present in meat and dairy products possibly due to the incident with these materials in Michigan, and syanides in heavy metal weights which in the past have been improperly disposed of in improperly destructive landfill areas.

The continuing problem with PCB's illustrates very well the fact that the final disposal and fate of all materials being manufactured must be considered before large amounts are distributed in the environment.

A material may be very safe for its intended use, but will it go away peacefully after it has been used or will it stay in the ground and contaminate ground and water as arsenic does or will it evaporate and be transported to the atmosphere as DDT's and PCB's have been.

If it degenerates in the environment, what are the degradation products? DDT has

a relatively short one. It degrades to a compound called DDE which has a much longer lifetime and still is widely dispersed in the environment. If it does not degrade like some particular compounds of PCB's, what does happen to it, where does it go, where does it end up?

Secondly, most of the people in this region live in urban areas, and thus the environment of these urban areas affects most of us. It has been known for a long time that it is less healthy to live in the City than it is in rural areas.

For instance a non-smoker in the City has a twenty-five percent greater chance of contacting lung cancer than somebody who is in rural areas. Presumably one of the reasons for this is a higher concentration of polycyclic aromatic tydrocarbons in the atmosphere in cities. These are materials that are produced among others in burning wood and coal.

The Occupational Health and Safety Administration concerns itself with making a working environment a safe place to work in where a worker spends forty hours a week or so, but many

workers and their families live close to the plants or in the neighborhood where there are other manufacturing facilities. These families are exposed to that environment for one hundred sixty-eight hours a week and workers are exposed to that environment outside of working hours. Since these environments are less healthy because of some of the materials given off by the plants thus the inhabitants of Gary, Indiana, and South Chicago, Illinois have been exposed to emissions from coke ovens. People in Ohio and elsewhere have been exposed to low levels of vinyl chloride monomore which sometimes maybe vinyl chloride. People drinking the waters of Lake Superior have been exposed to a high concentration of asbestos fibers in the water.

So while much has been accomplished in recent years with the enforcement of the Clean Air and Clean Water Acts there is still more to do, and hopefully the Toxic Substance Act will focus more on these emissions from plants which contain toxic materials.

Finally I would like to talk about a little chemistry for a minute.

First of all we have heard today everything is made of chemicals. The clothes we wear, the cars we drive, and all the food we eat is chemicals, and while most of these materials have beneficial effects they're not hazardous if they're properly used. All materials that are potential toxics can cause harm if misused. The important words on the labels of many consumer items are "These materials are safe if used as directed." The Toxic Control Act is directed towards materials in the normal use which may present a hazard to people. However, the problem is in many cases it is not clear what normal use is.

While the general materials for consumer use are reasonable and well labelled, many of the materials used in businesses and in industries are identified only by the common name or trade name or a code number, and a person using them has no idea if he's dealing with a potential hazardous material or does he have sufficient information to be able to look up the property of the materials. Since he doesn't know what the material is or necessarily its proper use,

he does not know what misuse of the material constitutes.

Now just for an example artists are exposed to a large number of potential hazardous materials. For painters this includes the solvents and the pigments they use. Some of the lead base glazes that the people who work with ceramics use are toxic, but usually none of these materials are identified as to their chemical content, and so far the artist has no way of knowing what the hazards of these materials are or what uses of them that he has to be careful of. There are many examples of this.

Perhaps the major source of PCB's to Lake Michigan was a manufacturing facility in Waukegan, Illinois where a PCB base material is used as a hydraulic fluid identified by its brand name of Pydrol, and presumably the people who used that material had no idea that it contained PCB's or knew it contained PCB's. They didn't know what problems the PCB could produce.

There are provisions in the Toxic Substance Control Act for labelling materials, but seem to apply only to the group of fifty

chemicals or so which a committee of eight recommends to the Administrator of the EPA. It would seem to me to be necessary to label all materials as to their contents, as to their chemical contents, and perhaps also with a simple code which would designate the type of, types of hazards that these materials may present if used and perhaps a code for a recommended method of disposal of these materials.

Okay, thank you very much.

MR. McDONNELL: Thank you, Doctor Murphy.

Now Jack Dumelle.

MR. DUMELLE: A long time ago in 1964 I was doing a study of air pollution in the Chicago Metropolitan Area, and a fellow named Ken Johnson from the Public Health Service and his Supervisor, a fellow named Austin Hallard (phonetic) and his Supervisor, a fellow by the name of Gene Schueneman (phonetic) with whom I'm sure are familiar to some of you in the air pollution end of it one way or the other.

The reason I bring that all up besides the name dropping is one, we came out with a report in 1966. We focused mainly on

sulphur dioxide and particularly in the Chicago area. We didn't make much mention of carbon dioxide or ozone which are subsequently shown to be a problem in the area and have not as yet been solved.

A couple of years before that when I was in the Chicago Department of Air Pollution Control I did a memo for John Dubo (phonetic) who was the Deputy Mayor under Mayor Daley, and pointed out based on some Los Angeles figures which were available at the time, but based on these figures which gave certain gasoline consumption per square mile that Chicago would approach those levels, and I only predicted at that time that perhaps in some five years or so we would get smog in the Chicago area. I was off, and it didn't come to pass in 1966 as I thought perhaps it would, but it did come to pass in 1974.

The point of the whole business is as Jim and others have said, there are all these new problems we can't solve. One pollutant largely controlled in the City of Chicago to a great extent is the insidious low sulpher regulation backed up by the states later on, and we

still have these other problems and who knows what else.

I did want to give a couple of examples which I think perhaps will lead me into the major things I want to propound as sort of, as sort of questions. I don't claim to have any answers. Some of them are sort of philosophical. Some are legal. Some are policy making, but about a year ago the -- you may remember the whole business of chloroform in foodstuffs and toothpaste and so forth came out, and the worry that it was a carcinogin that was being used for the tingling sensation in the toothpaste and so forth. They named some of the brands, and I had a half-used tube of this particular brand, McCleen's I think it was, around the house, and being frugal I kept using it. After about the second or third time I said, "What the hell am I doing?" and I just pitched it out. I think that is illustrative of the realization that comes to you after awhile. I said, "I am not going to take that particular hazard." You can say okay, that is a foodstuff and that comes under the FDA or something else and certainly not -- probably not TSCA or TSCA

referred it over to the FDA on the referral part of this.

There is another connection you have to keep in mind. That is the whole body burden concept. If you look at a lot of criteria documents that we have received from the Environmental Health Resource Group over at the University of Illinois Medical Center it is usually done on body burden basis to see how much lead you ingest, how much you excrete, where it's coming from, from air, from water, from foodstuff, from smoking, and they work out a number and say, "Okay, you have got to cut it down to this," and this seems to be the area reducing water and reducing air or whatever. So you get some chloroform in toothpaste, and you're also getting some from the water supply, and everybody is sort of waiting for the Federal EPA to come out with the levels of permissible chloroform in the public drinking water supplies. Now this brings up I think a major public policy question, and you have got one of the topics we're speaking about tonight. That is the whole question as to whether a carcinogin really has a threshold

or it doesn't. It's terribly important and affects a lot of these particular determinations made under TSCA and by State Agencies and so forth.

Epstein will tell you I'm sure there is no threshold. It just takes a little bit of a carcinogen to kick a cell into cancer and so forth. Others will say well, we only have this particular one hundred micrograms or whatever and that kind of a thing. So I think at the basis of these determinations is the acceptance or non-acceptance of that particular scientific theory, and you may want to ask Doctor Epstein about it tonight when he speaks.

Another body burden illustration I can mention is recently the Federal EPA had some hearings on or comments I guess they were asking for on carbon monoxide in transportation strategies and one of the questions was something like this: "Should the transportation strategy be geared to reducing carbon monoxide to such levels as to protect the smoker as against the non-smoker." The reason being that the smoker has elevated carbon monoxide already, and can't

take as much as the non-smoker. I said in my comments yes, we're going to have to protect the smoker as well. There are sixty million of them. We can't just write them off, and break it down that way which means a tougher transportation control strategy, tougher things on the auto, and so forth.

So there is this common denominator we have to look at, and also this threshold concept.

I think perhaps to get over a little bit on the legal end of some of the things that we have been mentioning today the phrases in TSCA about unreasonable risk and substantial risk and the definition and the requests for comments by the Federal EPA and so forth, it may be good for us to point out that the Illinois Pollution Control Board that we have had we have gone through this sort of parallel exercise in that our Act states from June of 1970 signed by Governor Ogilvie for example says that for us to grant a variance we have to find arbitrary and unreasonable hardship, and you can say I am a engineer and these kinds of phrases really don't say much as to what is arbitrary and unreasonable hardship, what is

substantial risk of all of these things. In the end it's going to be decided by Courts somewhere, and the Court is going to look at the legislative intent and usually the Federal Congress is very good at understanding this, and they have these colloquies and these committee reports and try to very explicitly spell out the intent. The Judges don't always follow that, but the Senator and the Representatives agree and are pretty well up on trying to develop good a record as they can. It's much tougher on the State level where some of these things, committee hearings for example are not recorded, and a lot of the witnesses' testimony just is not done in a permanent form, and there is no conclusion of the committee on it such as it did pass or it did not pass. It's hard to find the intent. Committee hearings are not recorded in Illinois.

I think we could put all our comments in one particular thing, but in the end it's going to be a legal task somewhere probably at the U. S. Supreme Court level, will tell all of us what these particular phrases mean. If we just try to do the best we can. We have had the experience

in Illinois in doing the best we can, and three years later we find out on what we did was not correct. In the meantime we have a whole chain of decisions going up there on various cases, enforcement regulations, or something, all of which are going to be reversed. We now have this decision. We start all over again. That is the whole process, and there is not too much we can do about it.

I think that's probably enough as to what I can say. Just in summary I think to the public the whole problem of cancer causing materials is probably the most emotional -- at least I find in my reaction. People don't seem to worry much about heart attacks and strokes, but cancer is the thing that really frightens people for a good reason, and now we have had all of these prestigious groups like the World Health Organization and many others saying cancer is fifty to ninety percent environmentally caused, environmentally caused meaning things not only in water and air, but the foodstuffs. So that's the thing I think as we get into these things we're going to be looking at particularly, all

of us, cancer-causing things, and it is a question of whether or not there is a threshold, and how tight do we make these things. Do we do as we have done pretty much on the Clean Air Act, protect health completely or do we say it's okay. Let's hope many people don't get cancer or whatever. I think these are very tough decisions.

Thank you.

MR. McDONNELL: We now open it up for questions.

I have one written question that has been submitted by Jim Manders (phonetic) of the Michigan Chemical Company.

Is Mr. Manders here? Let me read your question: In view of the detailed depiction of PBB infected cattle in Michigan in the EPA sponsored movie "Can We Fish?" in view of the TSCA powers under Section 7 the imminent hazard section, why hasn't the EPA so acted?

In part two of the question: By not acting one assumes that it is not an imminent hazard in EPA's definition, if so, why the movie?

Well, movies are made for many reasons. One was the reason to get the point of

view across without the seriousness of the toxic problem. I think that movie did that very effectively.

In response to your question however, in not using Section 7, the Imminent Hazard Section, if I understand correctly the PBB incident in Michigan did occur before the passage of TSCA. The response by State authorities and others to cope with this situation was in motion before the passage of TSCA and is ongoing now. The purpose of the Imminent Hazards provision of that Act or any of the other Acts that are environmental, and we have an imminent and substantial provision in all of the Acts is not to replace state action, but to operate if there is personal, local, or state action, and in addition to that if there is local and state action, if there is anything else that the Federal Government can do in addition to that state action, and I think in this particular situation the question arises of what is it that the Federal Government would have accomplished by invoking this provision somewhat after the fact. I'm not discussing it completely. It may well be that the question may

still be opened in the State of Michigan on this particular point.

I also would add just by looking at the background that the imminent and substantial risk or hazard provision of any of these new environmental Acts that were passed since 1970, there is only one time that the provision has been used. I'm not saying that is right, that it was only used one time, but it was used one time. That was in the Clean Air Act in 1971, in Birmingham when the particulate went sky-high, and steel mills were asked to be closed in the middle of the night. Surprisingly we have had very few requests to invoke this from either state or local authorities or from private citizens for that matter, but it is my response to you, Mr. Manders, for what it is worth.

Are there any other questions?

MR. SCHAUMBURG: Jim Schaumburg (phonetic), EOP Products.

Just a followup on that. I think that showing the movie PBB and also your brochure which you sent out announcing the meeting does interject a bit of confusion and perhaps credibility

into the EPA's announced intentions for this meeting and with regards to TSCA itself because as we found out this morning I think it was Ken Johnson who responded to the question. There is very little in TSCA that has anything to do with accidental mixing or spilling of chemicals, and I think that by mixing these two things you do confuse. You do inject confusion into people's minds. The only thing that TSCA would have helped out with regard to the PBB situation has to do with the question of how much residual PBB can be tolerated in the infected animals who injected the feed. Now if there had been pre-market testing before that we would have perhaps a good answer to that question, but to me that is the only relationship that PBB has to it. I think that people know how dangerous chemicals can be. I think that has been pretty much established. I don't think that a PBB movie had anything at all to do with what is going on here today.

MR. McDONNELL: Well, I think your viewpoint certainly expresses the viewpoint of sensitivity and perhaps one of the purposes of this conference. I think also there is a great sensitivity that we

hear constantly in the other direction, and that is we hear from environmentalists, we hear from concerned citizens, we hear from just the every-day Joe, and we hear from people who work alongside of us who see some of the problems associated with toxic substances. Believe me there is a real degree of sensitivity on that side also, and I think one of the things as I mentioned in the introductory remarks that I made was that what TSCA has done in the sense of setting this new Law in motion and acting as a preventive that is going to take awhile to really get into motion. It has given a new awareness and a new sense of direction to the regulatory agency and to others about the substances that are already out there of which there is great concern. So I don't think you really or at least we're not going to from a Federal standpoint look at TSCA as just a separate statute that sits here over on the side. There is an integrated approach that is developing in the Environmental Protection Agency that looks at the whole toxic situation, and I think the purpose of that movie this morning was to represent that whole, not just one segment. That is

something I think all of us have to get away from, and that is the fragmented approach we had in the past.

MR. SCHAUMBURG: I think I'll respond to that.

MR. McDONNELL: I don't mean that in the sense of putting you down, but there are lots of viewpoints on toxic substances.

MR. SCHAUMBURG: I realize that, and I'm not criticizing TSCA. I hope you don't think I'm doing that. That is what some of your comments seem to indicate.

MR. McDONNELL: No, I'm sorry. I didn't mean to imply that.

MR. SCHAUMBURG: Okay, I guess the point I'm making is that there is going to have to be cooperation, and also I guess I'm a little bit disturbed about let's say the very loose type of descriptions, inflammatory or emotional, completely emotional feelings. I know there is some emotion attached to any situation that involves the loss of human lives, sickness, and so forth, but I think that in appealing to a group such as I think this is that you don't have to take that

route. I certainly think -- I know for instance that the integrated approach is necessary that you have to have it, but I think there is an implication that is left in people's minds when you connect PBB to toxic substances. It's okay, now you have got toxic substances. We're going to prevent the accidents that toxic substances gets to that, it can deal with the situation in Michigan which it cannot do.

MR. McDONNELL: I think you made your point, and you made it well.

It would very difficult to prevent human error.

MR. BRUNGS: Somewhat unrelated, since my workday ends at 4:30 I'm now speaking as a private citizen.

MR. McDONNELL: You do it at your peril.

MR. BRUNGS: I have always had the particular problem in that there is no way one should initially determine potential hazard of a material like PCB because according to all the plans and screens there is no way that millions of pounds get into Lake Michigan.

Only a statement concerned for

those who have to work on a regular basis. How is it possible to handle those routine accidental losses of these highly toxic materials when you almost have to guess if they can or cannot happen. I don't know how you handle it. It may necessitate some at times what might appear on the surface unnecessarily strict regulations to take things like that into account.

MR. MURPHY: I would like to comment just a little bit on that. I think perhaps if the Toxic Substance Control Act had been enforced PCB's would probably never had gotten into the market. In that we have now had experience with PCB's and we're familiar with known degradation of the environment and their bio concentration factor.

The PBB's are chemically similar. They concentrate in similar ways on weight basis. They're more toxic than PCB's are, and their principal use was as a fire retardant dispersed throughout the environment with other things. PCB's we can say that there are these close uses. Whether they are close or not is unimportant. With the PCB's we have all open uses. So with

that example I think perhaps we could not have seen the PBB's although I certainly agree that accidents happen and will continue to happen.

MR. McDONNELL: There seems to be a general stipulation of the fact we have human error which is going to continue.

More questions?

Fine, Jake.

MR. DUMELLE: Bill Brungs, I wonder if you could explain the coughing fish test.

MR. BRUNGS: The coughing fish test is a procedure used by quite a few laboratories mostly like ours or a university that basically is a means of monitoring continuously how rapid a fish moves their gills, and as they move their gills it is a particular process that called clearing the gills. This is picked up on a strip chart and recorded and so forth. If fish are exposed to sub-lethal or even lethal stress they do this more frequently. So you can monitor a fish and say put it a forward stream that is supposedly clean and he behaves somewhat normally. If something happens to the treatment process or a new chemical is put into the system this has

a reasonable chance of picking this up by an increase in frequency and I think the people down at VPI have it hooked up with computers and alarms and stuff like that, and it's just one of a large number of procedures that are out there somewhere, and if the proper people who know what is going on put these together sometime they're very useful, but that's a joke with the newspaper, coughing fish syndrome or something like that. It's nothing new. It's just a normal occurrence of fish, but a good short term procedure for waving red flags. It's well published and well documented.

MR. McDONNELL: Our time is about up. Since we started a few minutes late, are there any other comments or questions that anyone would like to make.

If not, thanks for the opportunity to present this to you today.

MR. DUPREY: We have one more speaker left.

Prior to getting to the next speaker we do have a few announcements we would like to make. First with respect to the proceedings we will be preparing a proceedings of this.

I'm not sure whether the cost of this is going to be so enormous we can't send them to everybody. However, I would intend at a minimum to see that it's made available to people here whatever the cost might be at an appropriate -- either from GAS or some other groups. So we will send those in attendance here a notice of availability of the documents at a minimum.

If it can be done at a low cost then we might send it out directly. I'm not sure it can, and I'm probably very wrong.

We might do a summary of the proceedings in any event which we could send out.

Also there was a working paper, strategy paper that was available that was put in the back earlier which I had not mentioned earlier. I'm sure someone else did, but we had a limited number of copies of them, but we're going to be getting more of them for anyone who wants to write in for one.

I would also want to thank a couple of people with our staff office, just put in an enormous amount of energy in this meeting in getting speakers, arrangements, and everything.

It's a lot of work, John McKinnis (phonetic) with our Pesticides Branch and Jane Kennerly (phonetic) who is with the Public Affairs Office who really did a lot of work in putting this together. All I had to do was show up here and most of the other people who are speaking.

At this point I want to introduce Lee Botts who is going to make a few marks at this evening's session for those of you who are going to be returning.

MS. BOTTS: If you are concerned that the discussion will wander away strictly from the Toxic Substances Control Act don't come tonight. I know that the conversation is going to wander away from the provisions of the Act. It is intended to be an opportunity for those members of the Environmental Organizations, Consumer Organizations, individuals who are concerned with the relationship between use of toxic materials and public health to have an opportunity to express those concerns, and we will be showing the movie again. We will also be showing a slide show about the Act itself at the beginning of that meeting. So if you want to come, and

you did see those items this morning, you can come late. You are all invited. We do think that we will have people there who did not attend these sessions during the day, and I just want to explain that there will be a different quality. The session this evening has a somewhat different purpose.

Thank you.

MR. DUPREY: Thank you, Lee.

At this point then we felt that since within this area, the region five states, we have experienced a major toxic pollution problem that we have experienced here has been from the PCB contamination that we should have on the agenda an item that deals specifically with that problem, and what is happening under the Toxic Substance Control Act in dealing with that.

We're priviledged to have here from our Headquarters Office Mr. George Worth who is in charge of the activities going on in developing PCB regulations under the Toxic Control Act.

MR. WORTH: Thank you. I know it's late, and I will attempt to make this as quick as possible

primarily because two papers were handed out that described our most current thinking on the regulations which are the first two actions we expect to take under the Toxic Substance Control Act.

We primarily attempt to manage what we refer to Section 6 action under the Law, and that is primarily the standing either -- or limiting the manufacturing processing use, distribution in commerce, and disposal of various chemicals.

I have learned two interesting things here this afternoon. One is that Bill Brung gets to talk off the record past 4:30. Since I started this I don't talk to my wife and kids off the record. The other thing was that human error is understandable and expected. I hope everyone remembers that as we attempt to make the first definition of what is an unreasonable risk to the health and environment.

Basically I will answer questions on chloroform carbons but I think basically the handout pretty well describes that PCB one is a little bit more complicated, and we'll just take

a few minutes and describe the basic structure how we do that.

The Act specifically requires action on PCB's and that action namely was to publish a dispose-all and regulation in final by the 1st of July of this year. The Act further went on and demanded a ban on manufacturing and within other totally enclosed matter, manufacturing in use both in a totally enclosed manner on January 1st of next year, and then a complete ban on manufacturing the following January 1st and on July 1st, 1979, two and a half years from the effective date of the Act a ban on distribution in commerce.

Basically the Agency's plans are to promulgate those regulations by the 1st of July which means we must within the next few weeks propose those regulations and prepare and hold an informal hearing. We plan also on the 1st of July to propose regulations that will cover all of the definitions and interpretations necessary to conform to the manufacturing bans and manufacturing uses and distribution bans over the next two and a half years. I might

point out there is a ban only a PCB uses in other than totally enclosed matters.

If everyone has this paper, this two-page PCB regulation we're going to go just down through the page two items starting with information needs. This basically outlines what we're thinking on the regulation and just make a few comments on those items.

Item one on the definition, currently that's more complicated than what is described here. What it basically boils down to is the Agency is considering finding a PCB for the purpose of the labelling and marketing as any chlorinated biphenyl compound with five hundred parts per million or more .05 percent. A determination that there are no health problems or environmental problems below that point. We know there are well down below that point.

The definition here is necessary for the purposes of disposal requirements. We want to dispose of PCB in such a manner so that we eliminate them from contaminating our environment, and if we define down to the parts per million, couple parts per million where we see

or suspect health effects, we will eventually have to incinerate or chemically waste landfill our environment because these things are spread over the environment. There is no intention in this regulation to eventually dig up the soils around the country or process the water through a disposal regulation. For coverage we're considering applying the regulation to what we call PCB articles because there are large and small capacitors, transformers. We're considering applying the regulation of PCB equipment. By that term we mean items that contain PCB articles such as microwave ovens that may contain a PCB capacitor or a TV set that may contain one, and so on down the line.

We would apply regulations on PCB containers. This would be both of articles and of equipment itself. In other words the packing crate for TV setswould be -- should carry the same labeling as the set itself does, and crate of the capacitor also should carry the label on PCB liquids itself.

Disposal, Ken Johnson mentioned that this morning currently the thing is that

incineration is the only ultimate disposal of PCB's, and that in the long run we are not prepared to put these items in chemical waste landfills and seal them off from our environment with the assurance that they will forever be controlled in such a manner. Now that is a questionable point, and we'll certainly be recruiting comment on that. I might say that throughout the regulation that is the point that is probably least from settled, but that is the current thinking on it at this time. Within that context we're suggesting that a disposal program be put together whereby for the next two years one would be allowed to go to the chemical waste landfill with his capacitors as he has in the past. Beyond that point everything would go to incineration with the exception of transformer casings after the PCB were removed and they were decontaminated down below the five hundred part per million level. That is what Item 5 describes down there.

Now at the current moment we do not have the contamination procedures we're talking about. We're looking for the technology

to produce that within the next two or three years so that by the time the shutoff essentially comes on going to chemical landfill they would be available, but by the same token we probably would not have totally sufficient incineration in terms of capacity right at the moment, and I believe in two or three years with the encouragement of this regulation, in other words all items that have to go to incineration, that the facilities will be built in that direction.

Basically we're talking about incineration at two thousand degrees Fahrenheit with a two second time and monitoring requirement supplied to it. We're basically asking that all new PCB items be marked within six months of the regulation. We're looking for a twelve month implementation. For the marking of transformers or capacitors currently in service. We're considering marking would be allowed for banks of capacitors. In other words you wouldn't have to mark each individual one for those in service. They would have to be marked individually when they came out of service and went to disposal.

We would have to keep records of the specific capacitors in there, and where their roots were through the electrical distribution system should they be changed.

The seventh item on this basically discusses who would have only admissible waste landfill type requirements supplied to them. Currently at the present time we're considering only households would be exempted or be allowed to go to the municipal waste type landfill with their specific products. Basically we're looking at -- you can see on the back page roughly fifty-five million capacitors. Our estimate on how many pounds of PCB's fall into that category is roughly one hundred and five million pounds probably at the highest guess. With that in proper perspective we have roughly three-quarters of a billion pounds out in service still in use of the one and a quarter billion pounds sold in the United States over a life of PCB's.

Basically we're looking at the large amount relative to what has been released into the environment thus far, but again in this case we feel that of course not all of these PCB's

would be ultimately reduced possibly ten to twenty percent. Working on some estimates in that area.

I think that basically summarizes what the thinking is on that particular regulation at this moment.

I would be happy to take any questions you may have or clarification.

MR. UNIDENTIFIED SPEAKER: Would the exact labeling on like the equipment, would that be specified or could each individual industry or manufacturer --

MR. WORTH: That would be specified exactly.

There will be a couple of different sizes in detail tailored to fit the size of the piece of equipment.

Would you come up to the microphone please. Give us your name.

MR. DOCTOR GORDON: Doctor Polly Gordon (phonetic).

I have a question to ask. Why is a substance as this substance has been, why are manufacturers continuing to manufacture allowed at all?

MR. WORTH: I believe I heard the question as why is manufacture allowed at all when the substance is as dangerous as it is?

MS. GORDON: Yes.

MR. WORTH: Throw one fact out there. The only American manufacturer has announced that he would stop manufacturing entirely the 31st of October of this year. I think it is a legitimate question to ask why have we continued to manufacture over the past three or four years when we have had the suspicion on PCB's or basically the proof on PCB's, and the problem is that there is another side of the story to PCB's. They have performed I guess it's fair to say magnificently as dielectric fluid relatively flameproof and provided a great safety margin from a fire hazard standpoint in this country, and I think it's fair to say that on the day that determination was made they presented environmental hazards and hence must ultimately go the technology was not in a position to essentially toss them out the door and stop immediately because of the need of men in our electrical industry.

I might also at this time say that

at the time this determination was made the uses of them were restricted strictly to enclosed systems and electrical items. They were formerly used as paint coatings, paper coatings, carbonous paper coatings, the hydraulic system fluids, heat exchange fluids. All of those uses have been restricted, and I believe they were all voluntarily restricted by manufacturers not to sell those uses.

Now as far as we can tell from the same surveys most all of those uses are going on in this country currently.

State your name.

MS. JOHNSTON: Eileen Johnston.

What are we doing to stop the import?

MR. WORTH: The Law specifically defines the Act of Importing synonymous with the Act of Manufacturing so any bans applying against manufacturing are applied against importing.

Any other questions?

Thank you.

MR. DUPREY: Okay, thank you.

Let me just remind you for those of you who are returning to the evening session

that it begins at 7:30 p.m. and that it would be I guess approximately a half hour after that that we might get into the panel discussion about 7:30 for those of you who have seen the film. I want to reiterate what we said. I think we do have a different kind of session planned for this evening. We are going to focus more on the public problem and health question, and also I want to say that we welcome your continual involvement in this. As we go on we hope that we will continue to have meetings such as this and perhaps even different types of sessions where we are more into the implementation stages of the Act.

So we do intend to follow up.

Thank you very much for coming.

The meeting will be in this room the entire portion.

(WHEREUPON, SAID MEETING WAS RECESSED UNTIL 7:30 P.M.)